"Victor Babeș" University of Medicine and Pharmacy of Timișoara

Faculty of Medicine

VARIANTS OF GRIDS

FOR THE DISSERTATION EXAM (for university studies offered combined by bachelor's and master's degrees)

Study program - MEDICINE (in English)

Session September 2026/February 2027

Cuprins

CHAP. I - CARDIOLOGY 4
ANSWERS CHAP. I - CARDIOLOGY 56
CHAP. II - DIABETES, NUTRITION, METABOLIC DISEASES AND RHEUMATOLOGY 58
ANSWERS CHAP. II - DIABETES, NUTRITION, METABOLIC DISEASES AND RHEUMATOLOGY 85
CHAP. III - ENDOCRINOLOGY 86
ANSWERS CHAP. III - ENDOCRINOLOGY 91
CHAP. IV - GASTROENTEROLOGY 92
ANSWERS CHAP. IV - GASTROENTEROLOGY 115
CHAP. V - NEFROLOGY 116
ANSWERS CAP. V - NEFROLOGIE 143
CHAP. VI - PNEUMOLOGY 144
ANSWERS CHAP. VI - PNEUMOLOGY 158
CHAP. VII - HEMATOLOGY 159
ANSWERS CHAP. VII - HEMATOLOGY 167
CHAP. VIII - NEUROLOGY 168
ANSWERS CHAP. VIII - NEUROLOGY 179
CHAP. IX – INFECTIOUS DISEASES 180
ANSWERS CHAP. IX – INFECȚIOUS DISEASES 190
CHAP. X - DERMATOLOGY 191
ANSWERS CHAP. X – DERMATOLOGY 207
CHAP. XI - PSYCHIATRY 208
ANSWERS CHAP. XI - PSYCHIATRY 214
CHAP. XII - SURGERY 215
ANSWERS CHAP. XII – SURGERY 300
CHAP. XIII – PLASTIC SURGERY 303
ANSWERS CHAP. XIII – PLASTIC SURGERY 312
CHAP. XIV - VASCULAR SURGERY 313
ANSWERS CHAP. XIV - VASCULAR SURGERY 322
CAP. XV - ORTHOPEDICS 323
ANSWERS CHAP. XV - ORTOPEDICS 344

CHAP. XVI - UROLOGY 345
ANSWERS CHAP. XVI – UROLOGY 355
CHAP. XVII – E.N.T 356
ANSWERS CHAP. XVII – E.N.T. 371
CHAP. XVIII - OBSTETRICS-GINECOLOGY 372
ANSWERS CHAP. XVIII - OBSTETRICS-GINECOLOGY 393
CHAP. XIX – ANESTHESIA AND INTENSIVE CARE 394
ANSWERS CHAP. XIX – ANESTHESIA AND INTENSIVE CARE 401
CHAP. XX - PEDIATRICS 402
ANSWERS CHAP. XX – PEDIATRICS 413
CHAP. XXI - EPIDEMIOLOGY 414
ANSWERS CHAP. XXI - EPIDEMIOLOGY 417
BIBLIOGRAPHY 418

CHAP. I - CARDIOLOGY

1. *The following statement about venous thromboembolism is false:
   A. It is difficult to diagnose
   B. The clinical aspects are non-specific for pulmonary embolism
   C. Initial investigations are non-specific
   D. Routine investigations are specific for pulmonary embolism
   E. The diagnosis is delayed because routine investigations and clinical aspects are non-specific

2. *Arterial and venous thrombosis:
   A. Occurs both at the level of arteries and veins
   B. Arterial clots are red
   C. Venous clots are white
   D. Fibrin and red blood cells contribute to the formation of white thrombi
   E. Platelets and fibrin contribute to the formation of red thrombi

3. *The following statement is false except:
   A. The thrombus limited to the calf is defined as proximal venous thrombosis
   B. The thrombus limited to the popliteal vein is defined as distal venous thrombosis
   C. It takes several days for venous thromboses to produce clinical manifestations
   D. A localized thrombus cannot migrate into the bloodstream and cannot cause pulmonary embolism
   E. The most common origin of venous thrombosis is in the deep veins of the upper limb

4. *Which of the following statements is false:
   A. Typical manifestations of DVT include pain
   B. Swelling of a limb
   C. Cooling of a limb
   D. Redness of the limb on skin inspection
   E. Tenderness along the vein course

5. *Which of the following diagnoses is part of the differential diagnosis of DVT:
   A. Superficial venous thrombosis
   B. Bronchial asthma
   C. Acute coronary syndrome
   D. Aortic dissection
   E. Pneumothorax

6. *Which of the following diagnoses is part of the differential diagnosis of pulmonary embolism:
   A. Cardiac tamponade
   B. Cellulitis
   C. Post-thrombotic syndrome
   D. Baker's cyst rupture
   E. Acute arterial occlusion

7. *On the 12-lead ECG in acute pulmonary embolism, the pattern may show:
   A. Q3 T3 S3
   B. T3 Q1 S3
   C. S1 Q3 T3
   D. V1, V2, V3
   E. S1 Q3 T1

8. *Which of the following clinical features does NOT contribute to the two-tiered Wells score for deep venous thrombosis?
   A. Documented history of deep venous thrombosis
   B. Swelling of the entire leg
   C. Recent immobilization with plaster cast of the lower limbs
   D. Active cancer under treatment within the past 6 months
   E. Superficial collateral veins

9. *The following statements about D-dimers are true:
   A. A low Wells score does not require D-dimer testing
   B. D-dimers are measured only qualitatively in plasma
   C. Elevated levels indicate activation of the coagulation system
   D. D-dimers are specific for venous thromboembolism
   E. D-dimers are degradation products of fibrinogen

10. *A patient presenting with hemoptysis, ventricular rate 95 bpm, who had abdominal surgery 3 weeks ago and shows signs and symptoms of venous thrombosis, has a Wells score for pulmonary embolism of:
   A. 6 points
   B. 6.5 points
   C. 7 points
   D. 3 points
   E. 5.5 points

11. Among transient risk factors for venous thromboembolism are:
   A. Active cancer

B. Immobilization (bed rest >3 days)
C. Estrogen therapy
D. Recent travel >4 hours
E. Advanced age

12. Among persistent risk factors for venous thromboembolism are:
A. History of venous thromboembolism
B. Nephrotic syndrome
C. Hereditary thrombophilias
D. Antiphospholipid syndrome
E. Superficial venous thrombosis

13. Clinically, pulmonary embolism presents as:
A. In 65% of cases with pleuritic chest pain
B. Dyspnea
C. In 25% of cases with severe dyspnea
D. In 10% of cases with syncope
E. Asymptomatic

14. The following statements about superficial upper limb venous thrombosis are false:
A. The algorithm is not as well established
B. Pain and swelling are characteristic
C. Ultrasonographic examination is necessary
D. Ultrasonographic examination is not necessary
E. Endarterectomy is necessary

15. The standard anticoagulant treatment for venous thromboembolism includes the following phases:
A. Acute phase lasting 5-10 days
B. Acute phase lasting 1-3 days
C. Maintenance phase for at least 3 months
D. Subacute phase lasting at least 3 months
E. Long-term phase

16. Parenteral anticoagulant treatment for venous thromboembolism involves the following medications:
A. Low molecular weight heparin
B. Unfractionated heparin
C. Apixaban
D. Vitamin K antagonist
E. Eptifibatide

17. Concerning dabigatran, the following can be stated:
    A. It is not necessary to administer parenteral anticoagulant beforehand
    B. Parenteral anticoagulant administration is necessary beforehand
    C. It is a direct thrombin inhibitor
    D. It is a factor VII inhibitor
    E. It is a direct inhibitor of factor X and factor Xa

18. Concerning apixaban, the following cannot be stated:
    A. It is a direct oral anticoagulant
    B. It is not a direct oral anticoagulant
    C. Parenteral anticoagulation is needed
    D. It is administered at a higher dose for 7 days
    E. It is a direct factor Xa inhibitor

19. The following statements about anticoagulation in pregnant women with venous thromboembolism are true:
    A. Warfarin does not cause embryopathy
    B. Warfarin crosses the placenta
    C. Warfarin causes embryopathy between weeks 13 and 18
    D. Direct oral anticoagulants do not cross the placenta
    E. Warfarin can cause fetal hemorrhage

20. The use of warfarin during pregnancy may induce:
    A. Nasal hypoplasia
    B. Fetal hemorrhage
    C. Neurological anomalies
    D. Risk of intrauterine death
    E. Diaphyseal skeletal anomalies

21. PESI class II involves:
    A. The score ranges between 66 and 85 points
    B. The score ranges between 86 and 105 points
    C. The mortality risk is low
    D. The mortality risk is 0 to 1.6%
    E. The mortality risk is between 0 and 1.5%

22. In calculating the original PESI score, the following parameters are assigned 20 points:
    A. Respiratory rate over 30 breaths/min
    B. Chronic lung disease
    C. Altered mental status

D. Ventricular rate over 110 bpm
E. Oxygen saturation <90%

23. In calculating the original PESI score, the following parameters are assigned 10 points:
A. Male sex
B. Oxygen saturation <90%
C. Age >80 years
D. Congestive heart failure
E. Chronic lung disease

24. A 78-year-old male patient diagnosed with pulmonary embolism, presenting with ventricular rate 115 bpm and oxygen saturation 89%, can be described as:
A. PESI score 128 points
B. PESI class V
C. PESI score 118 points
D. PESI class IV
E. The patient has 2 points in the simplified PESI version

25. Regarding patients with cancer and pulmonary embolism, the following are true:
A. Low molecular weight heparins are more effective than warfarin
B. Direct oral anticoagulants are at least as effective as warfarin
C. Low molecular weight heparins can increase bleeding risk
D. Low molecular weight heparins are not more effective than warfarin in patients with active cancer
E. Direct oral anticoagulants do not increase bleeding risk in cancer patients and are thus considered safe

26. Concerning thrombolysis, the following statements are true:
A. It has no risk of bleeding
B. It carries a 4% risk of intracranial hemorrhage
C. It carries a 2% risk of intracranial hemorrhage
D. It is administered in pulmonary embolism with systolic blood pressure <90 mmHg
E. It is administered in pulmonary embolism with systolic blood pressure <80 mmHg

27. The following statements about thrombolysis are false:
A. Thrombolysis can be administered directly via catheter into the thrombus
B. It rapidly restores pulmonary perfusion
C. It is an exclusively systemic procedure
D. Thrombolysis in intermediate-risk pulmonary embolism is an indication of choice
E. Local thrombolysis can be used in iliofemoral thrombosis

28. The following statements about inferior vena cava filters are true:
    A. They are indicated when patients have contraindications to anticoagulation
    B. Active bleeding can be an indication for vena cava filter placement
    C. They are associated with an increased risk of deep venous thrombosis
    D. Inferior vena cava filters reduce the risk of recurrent pulmonary embolism compared to anticoagulation
    E. Permanent inferior vena cava filters are preferred

29. The following parameters receive 30 points in the calculation of the PESI score, except:
    A. Age over 80 years
    B. Cancer
    C. Decompensated chronic lung disease
    D. Systolic blood pressure < 100 mmHg
    E. Temperature < 36 degrees Celsius

30. The following statements about cancer-associated thrombosis are true:
    A. It has a favorable prognosis
    B. 10-20% of all VTE episodes are diagnosed in people with cancer
    C. Pathogenesis includes hypercoagulability directly induced by cancer
    D. Pathogenesis includes reduced mobility
    E. Pathogenesis includes increased mobility

31. The diagnosis of antiphospholipid syndrome should be considered in:
    A. VTE at a young age
    B. Morbidity related to pregnancy
    C. VTE at an older age
    D. Unexplained arterial thrombosis at a young age
    E. Venous thrombosis of unusual location

32. The following statements regarding the patient-related thrombosis risk assessment score are true:
    A. Active bleeding
    B. Obesity
    C. Admission to the ICU
    D. Known thrombophilias
    E. Acute stroke

33. The following statements regarding the patient-related bleeding risk are false:
    A. Active or treated cancer
    B. Uncontrolled systolic hypertension >230/120mmHg
    C. Hip fracture

D. Acute stroke
E. Hereditary bleeding pathologies

34. Regarding heparin-induced thrombocytopenia (HIT), the following can be stated:
A. It is associated with a strong prothrombotic tendency
B. Any heparin treatment should be discontinued
C. Alternative anticoagulants are represented by danaparoid, argatroban and fondaparinux
D. The adverse reaction occurs one month after administration
E. Patients who develop HIT should not be exposed to new to heparin in the future

35. The following statements about direct oral anticoagulants (DOAC/NOAC) are true:
A. They are variably eliminated by the kidney and have a half-life of 12 hours
B. They have a wider therapeutic index than warfarin
C. They can be administered in a fixed dose without monitoring
D. They are indicated in patients who have undergone mechanical heart valve replacement or with moderate or severe mitral stenosis
E. DOACs do not cross the placenta

36. Factor Xa inhibitors include:
A. Dabigatran
B. Apixaban
C. Rivaroxaban
D. Warfarin
E. Edoxaban

37. The following statements about low molecular weight heparin (LMWH) are true:
A. In pregnant women, LMWH is commonly used because it does not cross the placenta
B. Unlike unfractionated heparin (UFH), LMWH have a higher risk of heparin-induced thrombocytopenia (HIT)
C. The effect of LMWH is only partially reversible with protamine sulfate
D. The plasma half-life of LMWH is shorter than that of UFH
E. In patients with cancer-related thrombosis, LMWH are more effective than warfarin

38. The following statements about Apixaban are true:
A. It is a factor Xa inhibitor
B. It is not eliminated by the kidneys
C. The half-life is 12 hours
D. The maximum effect is reached at 24 hours
E. The antidote in case of bleeding is called idarucizumab

39. Treatment of bleeding in patients receiving direct oral anticoagulants (DOACs) includes:

A. DOACs should not be stopped
B. Supportive care with intravenous fluids and blood components such as packed red blood cells should be given as appropriate
C. The antidote for dabigatran is a monoclonal antibody, idarucizumab
D. Endoscopy should be considered
E. DOACs should be stopped

40. Post-thrombotic syndrome results from:
A. Development of collateral circulation
B. Localized inflammation
C. Proximal venous occlusion with blockage of return circulation
D. Plasma does not extravagate at the capillary level
E. Venous hypertension

41. Pharmacological prophylaxis in venous thromboembolic disease includes:
A. Use of knee-length or thigh-length anti-embolic stockings
B. Low-dose DOACs have been approved for the prevention of VTE following major hip and knee replacement surgery, continued for 2-5 weeks after surgery
C. Low-dose DOACs have been approved for the prevention of VTE following major hip and knee replacement surgery, continued for 6-8 weeks after surgery
D. Low-molecular-weight heparins (LMWHs) are most often used
E. Lower limb elevation

42. *Which of the following pathologies is a leading cause of heart failure:
A. Dilated cardiomyopathy
B. Hypertrophic cardiomyopathy
C. Arrhythmias
D. Constrictive pericarditis
E. Myocarditis

43. *The pathophysiological changes that occur in heart failure are the following, except:
A. Ventricular dilation
B. Increased collagen synthesis
C. Altered myosin gene expression
D. Myocyte hypotrophy
E. Salt and water retention

44. *Hyperdynamic circulation is a cause of heart failure. Which of the following pathologies can cause this type of circulation:
A. Mitral valvulopathies
B. Thyrotoxicosis

C. Amyloidosis
D. Atrial fibrillation
E. Myocarditis

45. *Which of the following statements about B-type natriuretic peptide (BNP) is false:
A. It is predominantly secreted by the ventricles
B. It is secreted in response to increased stress in the myocardial wall
C. BNP is a good predictor of cardiovascular events and mortality
D. BNP is elevated in patients with heart failure
E. Monitoring serum concentrations is routinely used to guide the treatment of heart failure

46. *We can classify heart failure as having a low ejection fraction when it falls below:
A. 50%
B. 30%
C. 25%
D. 40%
E. 45%

47. *Right ventricular systolic dysfunction can be caused by the following except:
A. Primary pulmonary hypertension
B. Secondary pulmonary hypertension
C. Arrhythmogenic right ventricular cardiomyopathy
D. Secondary reaction to acute left heart disease
E. Secondary reaction to chronic left heart disease

48. *The diagnosis of heart failure with reduced ejection fraction requires the presence of:
A. 3 conditions
B. 4 conditions
C. 2 conditions
D. 1 condition
E. 5 conditions

49. Which of the following pathologies are causes of right heart failure:
A. Right ventricular infarction
B. Chronic obstructive pulmonary disease
C. Thyrotoxicosis
D. Pulmonary embolism
E. Pulmonary hypertension

50. Signs that appear in heart failure are represented by:
A. Wheezing and rumbling pulmonary rales

B. Heart sounds 3 and 4
C. Peripheral leg edema
D. Painless hepatomegaly
E. Ascites

51. Radiography in heart failure evaluates:
A. Presence of cardiomegaly
B. Pulmonary venous congestion with redistribution of circulation to the lower lobes
C. Presence of pleural effusion
D. Kerley lines
E. Pulmonary hypertransparency

52. Salt and water retention in heart failure occurs through the following mechanisms:
A. Increased venous pressure that occurs in ventricular dysfunction leads to salt and water retention
B. Decreased venous pressure that occurs in ventricular dysfunction leads to salt and water retention
C. Decreased cardiac output causes decreased renal perfusion and activation of the renin-angiotensin system, further contributing to salt and water retention
D. Increased cardiac output causes decreased renal perfusion and activation of the renin-angiotensin system, further contributing to salt and water retention
E. None of the above statements explain the mechanism of salt and water retention in heart failure

53. The following statements about myocardial remodeling in heart failure are true:
A. It is a progressive process
B. Remodeling occurs under the influence of mechanical, neurohormonal and possibly genetic factors
C. The defining elements of remodeling are hypertrophy, myocyte loss and low myocardial fibrosis
D. The remodeling process continues for several weeks after the initial injury
E. The remodeling process continues for several days after the initial injury

54. The main causes of heart failure are represented by:
A. Pericardial diseases (constrictive pericarditis, fluid pericarditis)
B. Ischemic heart disease
C. Cardiomyopathy (non-dilatory): hypertrophic, restrictive
D. Dilated cardiomyopathy
E. Arterial hypertension

55. The following statements about the pathophysiological changes in heart failure are true:

A. Atrial natriuretic peptide is released by ventricular myocytes in response to stretch
B. Both BNP and NT-pro BNP are elevated in patients with heart failure
C. Increased afterload causes increased cardiac output
D. Decreased cardiac output causes decreased renal perfusion and activation of the renin-angiotensin system
E. Increased systemic venous pressure causes ascites, hepatomegaly, and decompensated edema

56. The following statements regarding investigations in heart failure are true, except:
A. The electrocardiogram evaluates the presence of ischemia, ventricular hypertrophy or arrhythmias
B. Chest radiography evaluates the systolic and diastolic function of the left ventricle
C. Echocardiography cannot provide information about parietal kinetics and left ventricular performance
D. Cardiac catheterization is used for the diagnosis of ischemic heart failure
E. Determination of BNP or NT-pro BNP is not part of the laboratory investigations of a patient with heart failure

57. The clinical picture of heart failure includes the following symptoms:
A. Pleural pain
B. Dyspnea on exertion
C. Orthopnea
D. Fatigue
E. Cardiomegaly

58. The diagnosis of heart failure with low ejection fraction requires the presence of the following conditions (according to the European Society of Cardiology Guidelines):
A. Radiography chest with changes specific to heart failure
B. Positive myocardial biopsy for cardiac amyloidosis
C. Characteristic symptoms of heart failure
D. Characteristic signs of heart failure
E. Low left ventricular ejection fraction

59. The New York Heart Association (NYHA) classification of heart failure includes:
A. Class I - symptoms of heart failure occur at rest
B. Class III - mild limitation of physical activity.
C. Class II - no symptoms at rest, but fatigue, dyspnea, or palpitations occur with ordinary physical activity
D. Class III - Marked limitation of physical activity. No symptoms at rest, but fatigue, dyspnea, and palpitations occur with less than usual physical activity

E. NYHA Class IV - symptoms of heart failure occur at rest and are exacerbated by any physical activity

60. The following classes of drugs are used in heart failure:
    A. Angiotensin-converting enzyme inhibitors
    B. Diuretics
    C. Nonsteroidal anti-inflammatory drugs
    D. Antibiotics
    E. Angiotensin II receptor antagonists

61. The following statements about drug treatment in heart failure are true, except:
    A. Beta-blockers do not improve functional status or reduce cardiovascular mortality
    B. Gynecomastia occurs in 1 in 10 men treated with spironolactone
    C. Adverse effects of ACE inhibitors include cough, hypotension, hyperkalemia, and renal dysfunction
    D. Angiotensin II receptor antagonists angiotensin causes cough as do ACE inhibitors
    E. Digoxin is indicated in patients with atrial fibrillation and heart failure

62. Acute heart failure may have the following etiologies:
    A. Acute coronary syndrome
    B. Acute valvular regurgitation from infective endocarditis
    C. Atrial fibrillation is frequently associated with acute heart failure and may require emergency cardioversion
    D. Aortic dissection that may cause severe aortic regurgitation
    E. Acute peripheral ischemia

63. The following paraclinical investigations are used to establish the diagnosis of acute heart failure:
    A. Transthoracic echocardiography
    B. 12-lead ECG
    C. Chest radiography
    D. Cardiac MRI
    E. Cardiac scintigraphy

64. Acute pulmonary edema from acute heart failure may include the following clinical features:
    A. Subcrepitant pulmonary rales
    B. Oxygen saturation below 90% in ambient air
    C. Tachypnea and orthopnea
    D. Burning chest pain that occurs postprandial
    E. Mucopurulent expectoration

65. The clinical picture in heart failure includes the following signs:
    A. Increased jugular venous pressure
    B. Unilateral basal crackles
    C. Peripheral leg edema
    D. Painful hepatomegaly
    E. Pleural effusion

66. The following statements about the treatment of heart failure are true:
    A. The use of beta-blockers is contraindicated in renal artery stenosis
    B. Diuretics improve dyspnea
    C. Angiotensin receptor antagonists do not affect bradykinin metabolism and do not cause cough
    D. Beta-blockers should be used with caution in patients with obstructive pulmonary disease
    E. Ivabradine is the treatment of choice for sinus bradycardia

67. The following statements about the treatment of heart failure are true, except:
    A. The use of beta-blockers is contraindicated in renal artery stenosis
    B. Diuretics improve dyspnea
    C. Angiotensin receptor antagonists do not affect bradykinin metabolism and do not cause cough
    D. Beta-blockers should be used with caution in patients with obstructive pulmonary disease
    E. Ivabradine is the treatment of choice for sinus bradycardia

68. *Select the true statements regarding defibrillation in cardiac arrest resuscitation:
    A. It is used to convert atrial fibrillation to sinus rhythm
    B. The direct current shock is released synchronously with the QRS complex
    C. One of the paddles is placed to the left of the upper sternum and the other above the cardiac apex
    D. One of the paddles is placed under the tip of the left scapula and the other above the cardiac apex
    E. One of the blades is placed under the tip of the left scapula and the other on the anterior wall of the left hemithorax

69. *The first step in basic life support (BLS) is represented by:
    A. Request for immediate help
    B. Avoiding exposure to additional hazards
    C. Verbal stimulus reaction testing
    D. Painful stimuli reaction testing
    E. Airway clearance

70. The chain of survival in cardiac resuscitation includes:

A. Early recognition of lipothymia
B. Rapid alerting of emergency services
C. Rapid defibrillation
D. Timely cardiopulmonary resuscitation
E. Pre-resuscitation care

71. Treatment of reversible causes during cardiac resuscitation refers to:
A. Hypoxia
B. Hipervolemia
C. Hyperthermia
D. Cardiac tamponade
E. Tension pneumothorax

72. The following statements are true regarding therapeutic post-resuscitation hypothermia:
A. Its importance is still unclear
B. It is always associated with decreased mortality
C. It is associated with worsening neurological disorders
D. It can improve the prognosis in unconscious adult patients with spontaneous circulation resumed after a cardiac arrest due to ventricular fibrillation occurring outside the hospital
E. It is associated with better neurological outcomes after electrical defibrillation for ventricular fibrillation

73. The further cardiac arrest rhythms are shockable :
A. Pulseless ventricular tachycardia
B. Ventricular fibrillation
C. Pulseless electrical activity
D. Asystole
E. Complete AV block

74. Select the true claims regarding advanced cardiopulmonary resuscitation (CPR):
A. CPR periods last 5 minutes
B. Adrenaline is administered after 3 shocks
C. Amiodarone is given every 2 minutes
D. Intravenous or intraosseous vascular approach is provided
E. Limit interruptions in compressions to a minimum

75. Basic cardiopulmonary resuscitation (CPR) in adults, outside the hospital, is applied as follows:
A. In case of an unresponsive patient who is not breathing normally
B. In case of an obnubilated patient, who does not breathe normally
C. 50 chest compressions are performed followed by 2 rescue breaths

D. 100 chest compressions followed by 2 rescue breaths are performed
E. 30 chest compressions are performed followed by 2 rescue breaths

76. The ABCDE algorithm of advanced life support in adults includes:
A. Airways
B. Breathing
C. Circulation
D. Disability
E. Exposure

77. Immediate post-cardiopulmonary resuscitation treatment includes, in all patients:
A. ABCDE algorithm
B. Body temperature control
C. Angiocoronarography
D. Ultrasound
E. Extracorporeal RCP

78. Select the true claims regarding cardiopulmonary resuscitation (CPR):
A. The sternum is rhythmically compressed to a depth of 8-10 cm
B. The sternum is rhythmically compressed with a frequency of 100-120 compressions /minute
C. It is necessary that each breath lasts for 1 second
D. Two effective breaths are required
E. CPR is periodically interrupted to reassess the victim's condition

79. In case of cardiopulmonary resuscitation (CPR), it is true that:
A. Mechanical CPR is routinely used today
B. In adults, 50 chest compressions are performed followed by 2 effective breaths
C. In pediatric patients, 15 chest compressions are performed followed by 2 effective breaths
D. Chest compressions act as a pump that provides a bidirectional blood flow system
E. Initiating CPR at the event site saves lives

80. *Which of the following is **not** a possible complication of mitral stenosis:
A. Cerebral infarction
B. Splenic infarction
C. Pulmonary infarction
D. Renal infarction
E. Intestinal infarction

81. *Mitral insufficiency can occur in:

A. Myocardial infarction
B. Infective endocarditis
C. Rheumatic fever
D. All of the above
E. Only in rheumatic fever

82. *In patients with severe mitral stenosis, the following may occur:
A. Acute pulmonary edema
B. Atrial fibrillation
C. Dyspnea on minimal exertion
D. All of the above
E. None of the above

83. *Aortic stenosis may have the following etiologies, except:
A. Congenital
B. Degenerative
C. Viral
D. Rheumatic
E. Post-radiation

84. *A 55-year-old obese, dyslipidemic male with no known cardiovascular disease reports fatigue, dyspnea on moderate physical exertion, and a syncopal episode during sustained effort at home. Clinical examination reveals BP = 130/80 mmHg, HR = 75 bpm, rhythmic heart sounds, a harsh, rough mid-to-late systolic murmur in the second right intercostal space, grade V/VI, radiating to the neck vessels. Resting ECG shows sinus rhythm, HR = 75 bpm, horizontal QRS axis, left ventricular hypertrophy with secondary repolarization changes (1 mm ST depression in DII, DIII, aVF, negative T waves in DII, aVF, V5-V6). What is the presumptive diagnosis?
A. Restrictive cardiomyopathy
B. Vasovagal syncope
C. Bicuspid aortic valve with severe stenosis
D. Dilated cardiomyopathy
E. Acute ST-elevation myocardial infarction

85. *The following statements about tricuspid insufficiency are true:
A. Echocardiography reveals right ventricular reduction and mitral valve laxity
B. Echocardiography reveals left ventricular reduction and mitral valve thickening
C. Echocardiography reveals left ventricular dilation and mitral valve thickening
D. Echocardiography reveals left ventricular dilation and tricuspid valve thickening
E. Echocardiography reveals right ventricular dilation and tricuspid valve thickening

86. *The following symptoms may occur in aortic insufficiency, except:
    A. Angina pectoris
    B. Band-like pain in the lower abdominal region
    C. Dyspnea
    D. Bounding pulse
    E. Palpitations

87. *A 77-year-old female, smoker, with hypertension, reports marked physical fatigue and dyspnea on minimal effort. Clinical examination reveals: bilateral breath sounds without added rales, BP = 110/60 mmHg, HR = 80 bpm, arrhythmic heart sounds, a grade IV/VI holosystolic murmur in the 5th left intercostal space, radiating to the axilla. ECG shows atrial fibrillation, HR = 80 bpm, intermediate QRS axis, negative T waves in DIII, V1. What diagnosis is suggested?
    A. Acute cardiogenic pulmonary edema
    B. Rheumatic mitral stenosis
    C. Acute pulmonary embolism
    D. Degenerative mitral regurgitation
    E. Rheumatic aortic stenosis

88. Severe mitral stenosis is characterized by:
    A. Mitral valve area <1 cm²
    B. Mitral valve area <1.5 cm²
    C. Mitral valve area <2 cm²
    D. Mean transvalvular gradient >10 mmHg
    E. Mean transvalvular gradient >5 mmHg

89. Methods of correcting mitral stenosis include:
    A. Mitral valve replacement
    B. Open-heart valvulotomy
    C. Closed-heart valvulotomy
    D. Balloon valvuloplasty via transseptal puncture
    E. Medical treatment only

90. The diagnosis of mitral stenosis is established by:
    A. Standard laboratory tests
    B. ECG in the presence of atrial fibrillation
    C. Transthoracic echocardiography
    D. Auscultation alone
    E. Transesophageal echocardiography

91. Etiologies of mitral insufficiency include:

A. Degenerative
B. Infectious
C. Rheumatic
D. Myxedematous
E. Dopaminergic antagonist-induced

92. On cardiac auscultation in mitral insufficiency, one may hear:
A. Holodiastolic murmur radiating to the base of the neck
B. Holosystolic murmur radiating to the axilla
C. Mid-to-late systolic click and late systolic murmur
D. Early systolic click and late diastolic murmur
E. Mid-to-late systolic click and late diastolic murmur

93. The correct treatment for severe organic mitral insufficiency is:
A. Heart failure treatment with ACE inhibitors, beta-blockers, diuretics
B. Corticosteroid therapy
C. Valve replacement in symptomatic patients with EF >30%
D. Valve replacement in symptomatic patients with EF <30%
E. Immunosuppressive treatment

94. A 76-year-old hypertensive patient, with a history of toxic exposure, COPD, and aortic stenosis, reports fatigue and recurrent angina with exertional dyspnea. Echocardiography shows normal left ventricular chamber size with concentric hypertrophy, reduced EF (40%), VmaxAo = 4.2 m/s, PmedAo = 50 mmHg, aortic valve area = 0.8 cm². The following statements are correct:
A. Moderate aortic stenosis
B. Surgical aortic valve replacement is indicated if surgical risk is low
C. Severe aortic stenosis
D. Vasodilator use requires caution
E. Severe aortic regurgitation

95. Which statements about anticoagulation in patients with valve prostheses are true:
A. Mandatory use of acenocoumarol
B. Possible use of factor Xa inhibitors
C. Target INR between 2-2.5
D. Target INR between 2.5-3 for low-thrombogenicity prostheses
E. Recommended only for patients over 65 years old

96. Specific skin lesions in infective endocarditis include:
A. Osler’s nodes
B. Splinter hemorrhages

C. Janeway lesions
D. Meynet's nodes
E. Roth's spots

97. Bacterial endocarditis prophylaxis is mandatory in:
A. Patients with metallic valve prostheses
B. Patients with a history of endocarditis
C. Patients with unoperated Tetralogy of Fallot
D. Patients with operated atrial septal defect
E. Patients with ascending aortic aneurysm

98. Infective endocarditis is the result of:
A. The presence of microorganisms in the bloodstream
B. Cardiac endothelial abnormalities
C. A prolonged febrile episode
D. Any non-invasive procedure
E. Deep abdominal palpation in acute appendicitis

99. Major criteria for bacterial endocarditis diagnosis include:
A. Fever
B. Newly documented intra- or atrioventricular conduction disorders
C. Echocardiographic evidence of a mobile intracardiac mass on valves or adjacent structures
D. Negative blood cultures
E. Two positive blood cultures with the same microorganism

100. In patients with infective endocarditis, persistent fever suggests:
A. Paravalvular lesion extension and abscess formation
B. Adverse drug reaction
C. Nosocomial infection
D. Pulmonary embolism
E. Mesenteric infarction

101. Cardiac auscultation in aortic stenosis is characterized by:
A. Fine diastolic murmur in the aortic area
B. Austin Flint mid-diastolic murmur
C. Crescendo-decrescendo murmur in the aortic area
D. Ventricular gallop sound
E. Harsh ejection murmur in the aortic area radiating to the neck base

102. A 63-year-old female smoker with hypertension and a history of acute rheumatic fever at age 17 presents to the ER with poor general condition, resting dyspnea with orthopnea, and rapid palpitations. Clinical examination reveals: tachypnea, bilateral breath sounds with mid-basal subcrepitant rales, SaO2 = 87%, BP = 120/60 mmHg, HR = 130 bpm, arrhythmic heart sounds, holodiastolic murmur in the 5th left intercostal space on the midclavicular line. ECG shows atrial fibrillation, HR = 130 bpm, intermediate QRS axis, negative T wave in DIII, V1. What is the emergency management?
A. Oxygen therapy
B. Intravenous loop diuretics
C. Intravenous digoxin
D. Oral anticoagulant
E. Antihypertensive treatment

103. Severe aortic stenosis in the elderly:
A. Is always due to congenital pathology
B. Has a degenerative etiology
C. Can cause syncope, angina, and dyspnea
D. Occurs in diabetics
E. Is associated with hematological pathology

104. A 77-year-old male with grade II essential hypertension presents with palpitations and dizziness. Cardiac auscultation reveals a systolic murmur in the mitral area. Echocardiography shows grade III mitral regurgitation with cusp calcifications, left atrium = 50 mm. ECG shows irregular rhythm, intermediate QRS axis, HR = 120 bpm, normal QRS complexes. The following statements are true:
A. The systolic murmur indicates mitral stenosis
B. The arrhythmia is due to left atrial dilation secondary to mitral valve disease
C. Anticoagulation is not indicated in this patient
D. The diagnosis is degenerative mitral insufficiency with atrial fibrillation with rapid ventricular response
E. Beta-blockers or non-dihydropyridine calcium channel blockers can be used for rate control

105. A 75-year-old patient with heart failure and permanent atrial fibrillation with controlled ventricular rate presents to the ER with a one-week history of fever (38°C), generalized edema, inspiratory dyspnea, marked fatigue, dry cough, BP = 100/60 mmHg, SaO2 = 90% on room air. ECG shows atrial fibrillation with rapid ventricular response (140 bpm) without acute ischemic changes. Myocardial necrosis markers are negative. Echocardiography shows a mobile mass on the noncoronary aortic valve leaflet. The most likely causes of heart failure decompensation are:
A. STEMI

B. NSTEMI
C. Endocarditis
D. Atrial fibrillation with rapid ventricular response
E. COVID-19

106. Risk factors for calcific aortic valve disease include:
A. Advanced age
B. High LDL cholesterol levels
C. Arterial hypertension
D. Diabetes mellitus
E. Young age

107. Possible etiologies of aortic insufficiency include:
A. Congenital
B. Severe left ventricular dilation from coronary artery disease or dilated cardiomyopathy
C. Rheumatic endocarditis
D. Syphilis
E. Traumatic valve rupture, marked ascending aortic dilation

108. From a pathophysiological perspective, severe mitral stenosis leads to:
A. Increased left atrial pressure
B. Left atrial hypertrophy and dilation
C. Increased pulmonary capillary pressure
D. Decreased left atrial pressure
E. Decreased pulmonary capillary pressure

109. The clinical picture of hemodynamically significant mitral stenosis may include:
A. Acute pulmonary edema
B. Progressive exertional dyspnea
C. Productive, frothy cough with blood-tinged sputum
D. Frank hemoptysis
E. Syncopal episodes

110. Which of the following echocardiographic criteria indicate severe aortic stenosis:
A. Peak transaortic velocity >4 m/s
B. Mean transvalvular aortic pressure gradient >40 mmHg
C. Peak transvalvular aortic pressure gradient >40 mmHg
D. Mean transvalvular aortic pressure gradient >20 mmHg
E. Peak transaortic velocity >2 m/s

111. *Most frequently, the acute coronary syndrome is caused by:
   A. Nitric oxide release
   B. Coronary involvement in the context of an acute type A aortic dissection
   C. Prostaglandine E2 release
   D. Coronary involvement in the context of an acute type B aortic dissection
   E. Rupture of an atherosclerotic plaque

112. *Coronary artery disease has multiple clinical forms, except:
   A. Stable angina pectoris
   B. Unstable angina pectoris
   C. Acute ST segment elevation myocardial infarction
   D. Coronary artery disease always has a symptomatic form
   E. Acute non ST segment elevation myocardial infarction

113. *Thrombolytic therapy is indicated in:
   A. Acute ST segment elevation myocardial infarction within the first 72 hours from onset
   B. Acute ST segment elevation myocardial infarction within the first 12 hours from onset
   C. Enjteromesenteric infarction within the first 12 hours from onset
   D. Stable angina pectoris CCS class II
   E. Acute non ST segment elevation myocardial infarction

114. *The following statements about antiplatelet agents are true, except:
   A. Clopidogrel is administered with a loading dose of 600 mg
   B. Maintenance dose for ticagrelor is 180 mg/day
   C. Loading dose for ticagrelor is180 mg
   D. Eptifibatide is an oral antiplatelet drug
   E. Eptifibatide is an antiplatelet drug with parenteral administration

115. *The following statements abou Killip classification are false, except:
   A. Killip I: absence of congestion-related crackles
   B. Killip II: congestion-related crackles on more than 50% of the pulmonary fields
   C. Killip IV: congestion-related crackles on more than 50% of the pulmonary fields
   D. Killip III: without ventricular gallop sign
   E. Killip I: congestion-related crackles in less than the lower half of the pulmonary bases

116. *The following statement is true regarding acute ST segment elevation myocardial infarction (STEMI) treatment:
   A. Reperfusion therapy is indicated for all patients with ischemic symptoms lasting for less than 12 hours, in the absence of a persistent ST segment elevation
   B. Thrombolitic therapy (bivalirudine) is recommended to patients who are unable to undergo coronary angioplasty in less than 2 hours

C. Metalic stents are used more often as compared to farmacologically active stents
D. Right femoral vein access is recommended for the coronary angiography procedure
E. Primary percutaneous coronary angioplasty is the reperfusion method of choice in centers that have available interventional cardiology laboratories

117. *The following situation represents an absolute contraindication for thrombolysis:
A. Oral anticoagulant treatment
B. Aortic dissection
C. Pregnancy
D. Uncompressible vascular punctures
E. Advanced liver disease

118. *The most frequent conduction disorder encountered after acute myocardial infarction is:
A. Ventricular premature beats
B. Ventricular tachycardia
C. Atrial fibrillation
D. Ventricular fibrillation
E. Different degrees of AV blocks

119. The following substances are not antiplatelet drugs:
A. Aspirine
B. Clopidogrel
C. Apixaban
D. Abciximab
E. Tenecteplase

120. The following statements about ivabradine use for stable angina pectoris treatment are true:
A. It is useful in the treatment of stable angina pectoris, particularly in refractory cases, including in patients with atrial fibrillation.
B. The recommended dose is 2.5-7.5 mg x 2 times/day
C. It inhibits the pacemaker potential If in the sino-atrial node
D. It inhibits the pacemaker potential If in the atrioventricular node
E. The adverse reactions include bradycardia and phosphenes

121. The following statements about the treatment of stable angina pectoris are true, except:
A. All forms necessitate percutaneous coronary angioplasty (PCI) with stent implantation
B. Aorto-coronary bypass revascularization is the only treatment option for patients with angina pectoris that remains uncontrolled despite medical therapy
C. Betablockers (bisoprolol) represents represents the first-line medication for patients with angina pectoris and acute heart failure

D. Aspirine belongs to the class of medications that reduce the risk of major cardiovascular events
E. Verapamil, a benzothiazepine, inhibits calcium channels in the myocardium, conduction tissue, and vascular smooth muscle

122. The following statements about the five types of myocardial infarction are true:
A. Type 1 is associated to sudden cardiac death
B. Type 2 is the consequence of atherosclerotic plaque rupture
C. Type 5 is associated to aorto- coronary by-pass
D. Type 2 is secondary to myocardial ischemia caused by the increase in oxygen demand, as it happens in severe anemia
E. Type 4a is the myocardial infarction induced by stent thrombosis

123. The following statements regarding antithrombotic medication used for acute coronary syndromes treatment are true:
A. The antiplatelet effect of heparin is evaluated by INR measurement each 6 hours
B. The antiplatelet effect of heparin is evaluated by INR measurement each 6 hours
C. Enoxaparine is administered twice a day, subcutaneously, 1 mg/kgc
D. Bivalirudine, a direct thrombin inhibitor, can be administered oraly, up to 4 hours after percutaneous coronary angioplasty
E. The Fondaparinux dose is of 2.5 mg sc/day, up to 8 days

124. The following statements about the pharmacologic treatment of acute coronary syndromes are true, except:
A. Prasugrel, a new generation anticoagulant, is preferred for patients that will undergo aorto-coronary by-pass surgery, reducing the hemorrhage risk
B. The maintanance dose for ticagrelor is 2*90 mg/day
C. Among the glycoprotein IIb/IIIa inhibitors are abciximab, tirofiban, and eptifibatide; however, these agents are administered intravenously
D. To reduce oxygen consumption, metoprolol can be administered, with both oral and intravenous formulations available
E. Morphine is used for analgesia, in combination with an antiemetic

125. The following statements about Killip class IV are true:
A. Patients are in cardiogenic shock
B. Patients may require the insertion of a Swan-Ganz catheter into the pulmonary artery
C. Patients may require the insertion of a Swan-Ganz catheter into the pulmonary vein
D. Positive inotrope medication (dobutamine, noradrenaline or dopamine) are used for severe acute heart failure
E. Nitroglycerin is used to reduce preload, regardless of blood pressure values.

126. The following statements about mitral insufficiency occurring after ST-segment elevation myocardial infarction are true:
   A. Transesophageal echocardiography is not necessary for accurately determining the etiology
   B. Papillary muscle rupture requires emergency myocardial revascularization through percutaneous coronary intervention and later surgical correction of the mitral valve pathology
   C. Papillary muscle rupture with severe acute mitral regurgitation is not associated with acute pulmonary edema and cardiogenic shock
   D. It can occur early in the course of ST-segment elevation myocardial infarction
   E. It occurs as a result of severe left ventricular dilation and dysfunction

127. The following statements about cardiac arrhythmias post-STEMI are false, except:
   A. Ventricular tachycardia is frequently encountered in STEMI, especially as a reperfusion phenomenon
   B. Ventricular tachycardia cannot cause cardiac arrest and never requires external defibrillation
   C. Atrial fibrillation is rarely encountered
   D. Cardioversion of atrial fibrillation is contraindicated due to frequent recurrence
   E. Intravenous magnesium may be useful in incessant ventricular tachycardia

128. The relative contraindications of thrombolysis are:
   A. Hemorrhagic stroke
   B. Gastrointestinal bleeding in the previous month
   C. Known hemorrhagic blood dyscrasia
   D. Pregnancy and the first postpartum week
   E. Refractory hypertension

129. The following statements about the treatment of permanent atrial fibrillation in patients with STEMI are true:
   A. In patients with permanent atrial fibrillation treated with medication, dual antithrombotic therapy is recommended: aspirin or clopidogrel plus oral anticoagulation
   B. In patients with permanent atrial fibrillation undergoing coronary artery bypass grafting, dual antithrombotic therapy is recommended: aspirin or clopidogrel plus oral anticoagulation
   C. In patients with permanent atrial fibrillation treated with medication, dual antithrombotic therapy is recommended: aspirin or clopidogrel plus oral anticoagulation (always a vitamin K antagonist)
   D. In patients with permanent atrial fibrillation treated with medication, triple antithrombotic therapy is recommended: aspirin and clopidogrel plus oral anticoagulation

E. In patients with permanent atrial fibrillation treated with medication, dual antithrombotic therapy is recommended: aspirin or clopidogrel plus oral anticoagulation (ticagrelor)

130. The following statements about post-myocardial infarction drug treatment are true:
A. Aspirin (300 mg) is administered daily
B. An oral beta-blocker is administered to maintain a heart rate above 60 bpm
C. Statins are used to achieve an LDL cholesterol level below 1.8 mmol/l
D. Sartans are routinely used, especially in those with a left ventricular ejection fraction < 40%
E. An ADP receptor blocker is administered

131. The initial diagnosis of ST-segment elevation myocardial infarction includes:
A. Severe chest pain that subsides with sublingual nitroglycerin
B. ST-segment elevation on ECG, including in patients with permanent pacemakers
C. Elevation of myocardial necrosis markers
D. Transthoracic echocardiography is useful, identifying the dissection flap in the descending aorta
E. Autonomic symptoms are frequently encountered

132. The following statements about coronary artery disease are true:
A. It has a multifactorial pathogenesis
B. Numerous mechanisms are involved in its pathogenesis, including carboxyhemoglobinemia
C. Sudden cardiac death cannot be a symptom of coronary artery disease
D. An atheromatous plaque with 55% stenosis is not considered a significant plaque
E. The first mechanism leading to thrombosis on an atherosclerotic plaque is deep endothelial injury

133. The following statements about the diagnosis of angina pectoris forms are true, except:
A. Atypical angina is defined as having 1 out of the 3 typical characteristics
B. Typical angina requires all 3 typical characteristics
C. Non-anginal chest pain presents with 2 out of 3 typical characteristics
D. Vasospastic angina occurs without a triggering factor
E. Microvascular angina occurs in patients with significant coronary lesions

134. ECG changes in ST-segment elevation myocardial infarction guide infarction localization. Thus:
A. Extensive anterior: V2-V5
B. Lateral: DII, DIII, and aVF
C. Lateral: DI and aVL
D. Inferior: DII, DIII, and aVF

E. Anterolateral: V4-V6, DI, and aVL

135. The following statements about the CCS functional classification of stable angina pectoris are true:
A. Class I: no angina during ordinary activities
B. Class I: angina during strenuous exertion
C. Class III: minimal limitation of daily activities
D. Class II: minimal limitation of daily activities
E. Class III: angina at rest

136. The following statements about vasospastic angina are true, except:
A. It always occurs following a triggering factor
B. It usually occurs during physical exertion, being a form of stable angina
C. It is more common in men
D. It is more common in women
E. It is characterized by transient ST-segment elevation during pain

137. The TIMI risk score for acute coronary syndromes includes the following variables:
A. Age over 55 years
B. Use of nitroglycerin in the past 7 days
C. Elevation of cardiomyocyte necrosis enzymes
D. Severe angina (more than 2 episodes of resting angina in the last 24 hours)
E. Known coronary artery disease (coronary stenosis over 50%)

138. Dual antiplatelet therapy in patients with acute coronary syndrome includes:
A. Aspirin, 3000 mg loading dose, followed by 75-100 mg for all patients
B. Aspirin combined with an ADP receptor inhibitor
C. Aspirin combined with clopidogrel (300–600 mg loading, then 75 mg/day)
D. Aspirin combined with a COX-1 inhibitor (ticagrelor)
E. Prasugrel is never combined, as it is an anticoagulant

139. The following statements about primary percutaneous angioplasty in acute ST-elevation myocardial infarction (STEMI) are true:
A. Radial access is preferred
B. Femoral access is preferred
C. Bare-metal stents are preferred
D. Drug-eluting stents are preferred
E. Intraprocedural anticoagulant therapy is not always necessary

140. Complications of acute myocardial infarction include:

A. Myocardial rupture, with good prognosis
B. Ventricular aneurysm formation
C. Ventricular septal defect, with 50% mortality at 12 months
D. Heart failure
E. Devereux syndrome

141. Lifestyle modification after acute coronary syndrome includes:
A. Body Mass Index (BMI) should be below 25 kg/m²
B. Diastolic blood pressure should be reduced below 140 mmHg
C. For diabetic patients, HbA1C should be below 7 g/l
D. Smoking should be completely stopped
E. Increased consumption of fruits and vegetables is recommended

142. *All of the following are extrinsic causes of sinus bradycardia, except:
A. Treatment with beta-blockers, digitalis
B. Acute ischemia and infarction of the sinus node
C. Neurally mediated syndromes
D. Hypothermia, hypothyroidism
E. Intracranial hypertension

143. *Third-degree atrioventricular block is characterized by:
A. Progressive prolongation of the PR interval until a P wave is blocked
B. Patients having an indication for implantable cardioverter-defibrillator
C. Pacing is not recommended for congenital blocks
D. Complete atrioventricular dissociation
E. Escape rhythm with narrow QRS complexes has an infra-Hisian origin

144. Mechanisms causing arrhythmias include:
A. Enhanced automaticity
B. Triggered activity
C. Reentry
D. Carotid hypersensitivity
E. Vasovagal syncope

145. *Choose the correct statement regarding ventricular tachycardia in a structurally normal heart:
A. It is usually benign, with excellent long-term prognosis
B. It never leads to cardiomyopathy
C. Symptom treatment is usually done with amiodarone
D. Ablation has low success rates
E. Calcium channel blockers are contraindicated

146. *The following are causes of acquired long QT syndrome, except:
A. Hypokalemia, hypomagnesemia
B. Administration of sotalol, amiodarone
C. Organophosphate poisoning
D. Romano-Ward syndrome
E. Diabetes, prolonged fasting

147. *Choose the false statement regarding treatment of the following bradycardia types:
A. Symptomatic sick sinus syndrome requires permanent pacing
B. Treatment of vasovagal syncope includes avoiding triggering situations
C. In some patients with malignant reflex syncope, dual-chamber pacemaker may be indicated
D. Identifying and correcting extrinsic causes is mandatory in sinus bradycardia management
E. Asymptomatic sick sinus syndrome in patients over 75 years requires pacemaker implantation

148. *The normal duration of the PR interval is within the following values:
A. 0.14–0.60 seconds (140–600 milliseconds)
B. 0.12–0.20 seconds (120–200 milliseconds)
C. 0.35–0.45 seconds (350–450 milliseconds)
D. 0.15–0.45 seconds (150–450 milliseconds)
E. 0.80–0.90 seconds (800–900 milliseconds)

149. *In atrial fibrillation with hemodynamic instability, what is the first therapeutic maneuver to implement?
A. Asynchronous external electrical shock
B. Administration of adrenaline
C. Synchronized external electrical shock
D. Administration of dobutamine
E. Administration of a dihydropyridine calcium channel blocker

150. *Wolff-Parkinson-White syndrome is described by the following statements, except:
A. It involves both a fast and a slow pathway at the atrioventricular node
B. It involves accessory pathways connecting atria and ventricles, located around tricuspid or mitral rings
C. The ventricular response to atrial fibrillation can be unusually rapid in patients with accessory pathways
D. It may be associated with orthodromic reciprocating junctional tachycardia
E. It may be associated with antidromic reciprocating junctional tachycardia

151. *Which of the following statements about atrial tachycardia is correct?
A. It cannot have a focal mechanism
B. It cannot have a macro-reentry mechanism
C. Identifying atrial extrasystoles on ECG during tachycardia is critical for diagnosis
D. Adenosine administration can highlight P waves in macro-reentrant atrial tachycardia by AV node blocking
E. Radiofrequency ablation is contraindicated

152. *Which of the following therapeutic strategies are not indicated for atrial fibrillation?
A. Implantation of an internal cardioverter-defibrillator
B. Rate control
C. Rhythm control
D. Anticoagulant therapy
E. Radiofrequency ablation for pulmonary vein isolation

153. *Methods for preventing embolic stroke in atrial fibrillation are as follows, except:
A. Administration of vitamin K antagonists with maintenance of an INR between 2 and 3
B. Administration of non-vitamin K oral anticoagulants
C. Performing angiography
D. Occlusion of the left atrium with a Watchman device
E. Surgical exclusion of the left atrium

154. The sinus node:
A. Is the physiological cardiac pacemaker
B. Depolarizes spontaneously
C. Has a rate of impulse discharge modulated by the autonomic nervous system
D. It is not the physiological cardiac pacemaker
E. It does not depolarize spontaneously

155. Among the extrinsic causes that can cause sinus bradycardia, we recall:
A. Hypothermia
B. Hypothyroidism
C. Cholestatic jaundice
D. Intracranial hypertension
E. Hyperthyroidism

156. Select the false statements regarding the function of the sinus node:
A. The physiological cardiac pacemaker is the sinus node that has the property of depolarizing spontaneously

B. The frequency of the sinus node is slightly higher in women
C. The rate of impulse discharge at the sinus node is modulated by the autonomic vegetative nervous system
D. Reduction of vagal tone or increase of sympathetic tone causes bradycardia
E. During expiration, parasympathetic tone decreases and heart rate increases

157. The following statements are correct:
A. Extrinsic causes of sinus bradycardia are: hypothermia, treatment with beta-blockers, neurally mediated syndromes
B. Sick sinus syndrome occurs as a result of idiopathic sinus node fibrosis
C. Neurally mediated syndromes occur as a result of the Bezold-Jarish reflex that can cause both bradycardia and reflex peripheral vasodilation
D. Carotid sinus syndrome occurs frequently in young people and always causes syncope
E. Vagal syncope can have a cardioinhibitory, vasodepressor, or mixed mechanism

158. Regarding atrioventricular blocks (AVB), the following statements are true, except:
A. First-degree AVB means a prolongation of the PR interval >200 ms
B. Second-degree Mobitz II type AVB represents a progressive prolongation of the PR interval until a P wave is blocked
C. 2:1 conduction blocks can be located at both the AV node and infranodal levels
D. Second-degree AVB from inferior myocardial infarction has a poor prognosis and emergency pacing is recommended
E. Monitoring is recommended for patients with second-degree Mobitz I AV block

159. Select the correct statements regarding third-degree atrioventricular block:
A. The escape rhythm with wide QRS complexes originates below the His bundle and is a slow rhythm (15 – 40 bpm), relatively unstable
B. AVB with wide complexes can be caused by ischemic heart disease, myocarditis or cardiomyopathies
C. Pacemaker implantation is recommended only if the patient presents repeated syncope
D. Lenegre disease is characterized by an inflammatory process in the proximal conduction system and occurs in young people
E. AVB with narrow QRS complexes responds to atropine and does not require permanent pacing

160. Regarding the conduction delay at the level of the bundle branches of the His bundle, the following statements are correct:
A. In right bundle branch block the activation vector moves to the left leads
B. Left bundle branch block is characterized by a deep S wave in V1 and a wide, late R wave in DI, V6
C. Right bundle branch block may be present in 5% of the healthy population

D. Patients with intraventricular conduction disorders may present with syncope (either due to intermittent complete block or the occurrence of ventricular tachyarrhythmias)
E. Left bundle branch block occurs frequently in the young, healthy population

161. The following are characteristic for the differential diagnosis of ventricular tachycardia:
A. Atrioventricular dissociation
B. QRS complex between 100-120 ms
C. Concordance of QRS complexes in the precordial leads
D. Rapid ventricular rhythm
E. Deep S waves in V1 and V6

162. Select the correct statements regarding ventricular arrhythmias:
A. Brugada syndrome, short QT syndrome, catecholaminergic polymorphic ventricular tachycardia are channelopathies that can cause ventricular arrhythmias
B. Sustained ventricular tachycardia always causes syncope or cardiorespiratory arrest
C. The heart rate in sustained VT is usually between 120-221 bpm
D. 80% of all wide-complex tachycardias are ventricular and the proportion is even higher in patients with structural heart disease
E. Clinical signs of atrioventricular dissociation are visible P waves, appearing randomly on the ECG trace

163. Regarding ventricular fibrillation (VF), the following statements are true, except:
A. It always causes cardiorespiratory arrest, patients require basic and advanced life support
B. VF is usually initiated by a ventricular extrasystole
C. Sometimes patients can tolerate ventricular fibrillation relatively well
D. Survivors have an increased risk of sudden cardiac death in the absence of reversible causes
E. Pacemakers are devices used in the first line of treatment for these arrhythmias

164. Select the correct statements regarding Brugada syndrome:
A. It causes ventricular fibrillation in patients with structural heart disease
B. The diagnosis is made based on classic ECG changes, which occur either spontaneously or through a provocation test with the administration of class I antiarrhythmic drugs
C. In 20% of cases, this pathology is inherited, being caused by a mutation of SCN5A gene
D. Drug treatment consists of beta-blockers or amiodarone
E. There is an increased risk of sudden cardiac death, especially in symptomatic patients or those with spontaneous ECG changes

165. Acquired long QT syndrome is treated as follows, except:
A. Correction of any electrolyte disturbances
B. Administration of magnesium sulfate 8 mmol (Mg2+) in 10-15 min for acquired long QT

C. Emergency administration of beta-blockers to decrease heart rate
D. Amiodarone is contraindicated in the long term, but can be used acutely, in intravenous administration
E. All patients require long-term implantation of a cardiac defibrillator

166. Select the correct statements regarding ventricular arrhythmias:
A. Aquired short QT syndrome requires implantation of o cardiac defibrillator
B. Idiopathic ventricular tachycardia usually originates from the right ventricular outflow tract or at the left ventricular septal region
C. Nonsustained ventricular tachycardia may occur in 6% of patients with a structurally normal hearts and usually does not require treatment
D. Treatment with beta-blockers can improve quality of life in symptomatic patients with nonsustained VT
E. Nonsustained VT lasts between 30 seconds and 1 minute

167. Regarding ventricular extrasystoles, the following are true, except:
A. When a ventricular extrasystole regularly follows each sinus beat, „pulsus bigeminus” may occur
B. Catheter ablation can be effective in all patients with extrasystoles
C. A high frequency of extrasystoles predisposes to left ventricular dysfunction
D. All patients with detected ventricular extrasystoles require beta-blocker treatment
E. The “R on T” phenomenon can lead to ventricular fibrillation in patients with structural heart disease

168. Select the correct statements regarding the implantable cardiac defibrillator (ICD):
A. ICD can be implanted for primary prevention in patients with heart failure and an ejection fraction ≤35%, classified as NYHA functional class <IV
B. ICD can be used to treat ventricular or supraventricular arrhythmias
C. ICD can act through internal shocks or overdrive pacing, but both interventions are painful for patients
D. The use of this device has reduced the sudden death rate in patients with a history of severe ventricular arrhythmias to 2% per year
E. ICD combined with cardiac resynchronization therapy can improve symptoms and life expectancy in patients with any grade of heart failure

169. Regarding sinus bradycardia, the following statements are true, except:
A. Diffuse atrial damage can cause sinus bradycardia or sinus pauses
B. In atrial fibrillation, sinus bradycardia means a heart rate below 50 bpm

C. Acute ischemia cannot induce sinus bradycardia
D. Sinus bradycardia is considered physiological in athletes due to increased vagal tone
E. Acute ischemia can be an intrinsic cause of sinus bradycardia

170. The following are part of neurally mediated syndromes:
A. Carotid sinus syndrome
B. Reflex (vasovagal) syncope
C. Postural orthostatic tachycardia syndrome
D. Tietze syndrome
E. Down syndrome

171. The following statements about bradyarrhythmia treatment are true:
A. Temporary pacing may be indicated in patients with reversible causes until sinus rhythm is restored
B. Symptomatic sinus node disease may require permanent pacing (DDD)
C. Patients with carotid hypersensitivity (asystole >3 sec), especially with reproducible symptoms during carotid sinus massage and after excluding life-threatening causes of syncope, may benefit from permanent pacing
D. There is no specific treatment for bradyarrhythmias
E. Temporary pacing is always contraindicated

172. The electrocardiographic characteristics of right bundle branch block are:
A. QRS duration >120ms
B. QRS duration >200ms
C. RSR’ pattern in leads V1 and V2
D. Left ventricle is activated normally, while right ventricle is activated with delay
E. Left ventricle is activated with delay while right ventricle is activated normally

173. The differential diagnosis between atrial flutter with 2:1 block and paroxysmal supraventricular tachycardia can be made using:
A. Carotid sinus compression
B. IV adenosine administration
C. Administration of angiotensin-converting enzyme inhibitors
D. Beta-blocker administration
E. Heimlich maneuver

174. Which of the following define respiratory sinus arrhythmia:
   A. It is dependent on autonomic tone fluctuations
   B. During inspiration, parasympathetic tone decreases and heart rate increases
   C. During inspiration, parasympathetic tone increases and heart rate decreases
   D. During expiration, heart rate decreases
   E. During expiration, heart rate increases

175. The electrocardiographic characteristics of left bundle branch block are:
   A. QRS complex duration <120ms
   B. Wide S wave in lead V1
   C. RSR' pattern in leads V1 and V2
   D. The electrical impulse initially reaches the left ventricle and only then the right ventricle
   E. The electrical impulse initially reaches the right ventricle and only then the left ventricle

176. The following statements about sinus tachycardia are true:
   A. It is a rhythm generated by the sinus node
   B. It is a rhythm generated by the atrioventricular node
   C. Heart rate is above 100/min
   D. It may be caused by anemia
   E. It may be caused by hypothyroidism

177. Treatment of atrial fibrillation may include the following:
   A. Oral anticoagulant
   B. Amiodarone
   C. Radiofrequency ablation with pulmonary vein isolation
   D. Alpha-2/central imidazoline receptor agonist
   E. Beta-blocker

178. Atrial fibrillation with wide QRS complexes may be associated with the following:
   A. Wolff-Parkinson-White syndrome
   B. Absence of pre-existing left bundle branch block
   C. Rate-dependent right bundle branch block
   D. Pre-existing left bundle branch block
   E. Absence of rate-dependent bundle branch block

179. The following characteristics define inappropriate sinus tachycardia:
   A. Occurs more frequently in men
   B. Occurs more frequently in women

C. Responsive to beta-blockers
D. Responsive to ivabradine
E. Responsive to administration of sartans

180. The following statements about atrioventricular nodal reentrant tachycardia (AVNRT) are true:
A. P waves may be absent on ECG during tachycardia
B. RR interval is irregular
C. P waves may be inverted (negative) immediately after the QRS complex during tachycardia
D. RR interval is usually constant and regular
E. Rare cause of palpitations in patients with structurally normal hearts

181. The following statements about atrioventricular reentrant tachycardia (AVRT) mediated by accessory pathways are correct:
A. It is mediated by accessory pathways
B. P waves are usually absent on ECG during tachycardia
C. P waves are visible between the QRS complex and the T wave
D. P waves of different morphologies and irregular RR interval are present
E. Has a sudden onset

182. Treatment of paroxysmal supraventricular tachycardias includes:
A. Propafenone
B. Lercanidipine
C. Radiofrequency ablation
D. Flecainide
E. Candesartan

183. Which of the following maneuvers may be used to stop a supraventricular tachycardia:
A. Valsalva maneuver
B. Ocular globe compression
C. Carotid sinus massage
D. Facial immersion in warm water
E. Homans maneuver

184. Which of the following statements regarding atrial fibrillation are correct:
A. It is the most common arrhythmia occurring in structurally normal hearts
B. The atria contract 300-600 times per minute during atrial fibrillation

C. The patient presents with a completely regular pulse
D. Often associated with dyspnea and reduced exercise capacity
E. Never converts spontaneously to sinus rhythm, requiring antiarrhythmic treatment and/or external electrical cardioversion to sinus rhythm

185. From a clinical point of view, atrial fibrillation can be classified as:
A. Paroxysmal - spontaneously converted after <7 days
B. Paroxysmal - spontaneously converted after >7 days
C. Persistent - continuous, lasts >7 days
D. Persistent - continuous, lasts <7 days
E. Permanent - continuous, with the joint decision of the doctor and patient to abandon attempts to restore sinus rhythm

186. Which of the following statements regarding acute phase treatment of atrial fibrillation are correct:
A. Heart rate control may be achieved using beta-blockers
B. Heart rate control may be achieved using sartans
C. Heart rate control is recommended to be done via radiofrequency ablation of the atrioventricular node
D. Cardioversion is recommended in cases of atrial fibrillation associated with hemodynamic instability
E. Cardioversion is recommended as early as possible, before anticoagulation, as soon as a hemodynamically stable patient is diagnosed with atrial fibrillation

187. Which of the following statements about atrial flutter are true:
A. It is an organized atrial rhythm, with an atrial rate of 250–350/min
B. Typical (isthmus-dependent) atrial flutter involves a macro-reentrant circuit in the right atrium around the tricuspid annulus
C. Typical (isthmus-dependent) atrial flutter involves a macro-reentrant circuit in the left atrium around the mitral annulus
D. On ECG, regular “sawtooth” waves (F waves) are described
E. May have fixed or variable atrioventricular block

188. The major criteria for the clinical diagnosis of infective endocarditis include:
A. Two positive blood cultures with the isolation of a typical microorganism for infective endocarditis in the absence of a primary focus (e.g., viridans streptococci, *Abiotrophia* species, *Granulicatella* species, *Streptococcus bovis*, HACEK group bacteria, community-acquired *Staphylococcus aureus*, or *Enterococcus* species)

B. Persistently positive blood cultures (isolation of the same microorganism from blood cultures taken at least 12 hours apart, from all of 3 or the majority of 4 separate blood cultures, with the first and last drawn at least 1 hour apart)
C. A positive immunofluorescence serologic test for Q fever with phase 1 IgG antibodies in a titer >1:800
D. Newly documented partial dehiscence of a prosthetic valve
E. Fever: temperature >38°C

189. The following represent minor criteria for the clinical diagnosis of infective endocarditis:
A. Echocardiographic evidence of endocardial involvement: an intracardiac mass with independent mobility on a valve or adjacent structures, in the path of regurgitant jets, or attached to prosthetic material, in the absence of other anatomical explanations
B. Newly documented valvular regurgitation
C. Predisposing factors: predisposing heart condition or intravenous drug use
D. Fever: temperature >38°C
E. Vascular phenomena: major arterial emboli, septic pulmonary infarcts, mycotic aneurysms

190. The specific skin lesions associated with infective endocarditis include:
A. Osler’s nodes
B. Splinter hemorrhages
C. Janeway lesions
D. Petechiae
E. Roth spots

191. The following are clinical features of infective endocarditis:
A. Altered general condition
B. Heart murmur
C. Arthralgia
D. Pyrexia
E. Epistaxis

192. A high clinical suspicion for identifying patients with infective endocarditis exists when there is:
A. A newly detected valvular lesion or new regurgitant murmur
B. Embolic events of unknown origin
C. Sepsis with an unknown source
D. Hematuria, glomerulonephritis, and suspected renal infarction
E. Dysuria

193. Blood culture-negative endocarditis:

A. Represents approximately 0.1% of endocarditis cases
B. Represents approximately 5–10% of endocarditis cases
C. The most common cause is prior antibiotic therapy
D. Is caused by bacteria that do not grow on standard culture media
E. Is caused by bacteria such as Legionella and Coxiella burnetiid

194. Infective endocarditis may have the following clinical courses:
A. Acute, fulminant
B. Chronic
C. Subacute
D. Subacute with low-grade fever and nonspecific symptoms
E. Favorable; heals 100% without treatment

195. Suggested antibiotic regimen for staphylococcal endocarditis:
A. Penicillin 1.2 g every 4 hours, gentamicin 80 mg every 12 hours
B. Penicillin 2 g every 8 hours
C. Vancomycin 3 g every 12 hours
D. Flucloxacillin 2 g every 4 hours
E. Benzylpenicillin 1.2 g every 4 hours plus gentamicin 80–120 mg every 8 hours

196. Patients at high risk of developing infective endocarditis and its associated complications include:
A. Patients over 70 years of age
B. Patients with prosthetic heart valves
C. Diabetic patients
D. Patients with a history of infective endocarditis
E. Patients with uncorrected cyanotic congenital heart disease

197. The European Society of Cardiology recommends the following for patients at high risk of developing infective endocarditis:
A. Antibiotic prophylaxis during high-risk procedures, such as dental procedures involving manipulation of the gums, the periapical region of the teeth, or perforation of the oral mucosa
B. Disinfection of wounds and eradication of chronic bacterial carriage
C. Elimination of infectious foci through antibiotic treatment
D. Self-medication with antibiotics
E. Undergoing piercings and tattoos

198. *A low clinical suspicion for identifying patients with infective endocarditis exists when there is:
A. Fever plus intracardiac prosthetic material
B. Embolic events of unknown origin
C. Sepsis with an unknown source
D. Hematuria, glomerulonephritis, and suspected renal infarction
E. Fever without any of the above

199. *The diagnosis of infective endocarditis is primarily based on:
A. Blood cultures and echocardiography
B. ECG
C. Chest X-ray
D. Urine culture
E. Abdominal ultrasound

200. *The suggested antibiotic regimen when clinical criteria for endocarditis are present, blood cultures are pending, and there is no suspicion of staphylococcal infection:
A. Penicillin 1.2 g every 4 hours, gentamicin 80 mg every 12 hours
B. Vancomycin 2 g every 12 hours
C. Penicillin 2 g every 4 hours
D. Benzylpenicillin 2 g every 4 hours
E. Gentamicin 200 mg every 8 hours

201. *Chagas disease:
A. Is caused by infection with Trypanosoma cruzi
B. May be associated with sarcoidosis
C. Is characterized by the presence of multinucleated giant cells
D. Has a rapidly progressive course and poor prognosis
E. Is endemic in South Africa

202. *According to the ESC classification, the following are types of cardiomyopathies, EXCEPT:
A. Hypertrophic cardiomyopathy
B. Dilated cardiomyopathy
C. Restrictive cardiomyopathy
D. Destructive cardiomyopathy
E. Arrhythmogenic cardiomyopathy

203. *In arrhythmogenic cardiomyopathy (ACM), the signs and symptoms may include the following, EXCEPT:
A. Symptomatic ventricular arrhythmia

B. Symptomatic supraventricular arrhythmia
C. Signs of right ventricular failure
D. Sudden cardiac death
E. Syncope

204. *Sporadic dilated cardiomyopathy (DCM) may have the following causes, EXCEPT:
A. Autoimmune diseases
B. Endocrine disorders
C. Chemotherapy
D. Excessive physical exertion (athletes)
E. Alcohol

205. Giant cell myocarditis:
A. Is a mild/moderate form of myocarditis
B. Is a severe form of myocarditis
C. Has an unknown cause
D. May be associated with autoimmune diseases
E. Has a slow progression

206. The following statements regarding myocarditis are TRUE:
A. Endomyocardial biopsy is considered the gold standard for diagnosis
B. Cardiac MRI is considered the gold standard for diagnosis
C. Viral serology is usually not useful
D. Viral serology is mandatory
E. In most cases, it resolves within a few months

207. Risk factors for sudden cardiac death associated with hypertrophic cardiomyopathy (HCM) include:
A. History of unexplained syncope
B. Family history of sudden cardiac death (<50 years old)
C. Family history of sudden cardiac death (<30 years old)
D. Massive left ventricular hypertrophy (>20 mm)
E. Massive left ventricular hypertrophy (>30 mm)

208. The signs of hypertrophic cardiomyopathy (HCM) include:
A. Sudden cardiac death
B. Chest pain, syncope, presyncope
C. Double apical impulse
D. Fourth heart sound (if the patient is not in atrial fibrillation)
E. Dyspnea due to impaired myocardial relaxation

209. In the treatment of hypertrophic cardiomyopathy (HCM), the following statements are TRUE:
   A. Chest pain is treated with verapamil
   B. Chest pain is treated with beta-blockers
   C. Dyspnea is treated with verapamil
   D. Dyspnea is treated with angiotensin-converting enzyme inhibitors (ACE inhibitors)
   E. Vasodilators are indicated because they may relieve left ventricular outflow tract obstruction

210. The treatment of arrhythmogenic cardiomyopathy (ACM) includes the following:
   A. Angiotensin-converting enzyme inhibitors (ACE inhibitors)
   B. Nitrates
   C. Amiodarone
   D. Sotalol
   E. Heart transplant

211. The clinical presentation of dilated cardiomyopathy (DCM) may include the following:
   A. Heart failure
   B. Cardiac arrhythmias
   C. Sudden cardiac death
   D. Embolic events
   E. Acute pulmonary edema

212. The treatment of dilated cardiomyopathy (DCM) includes the following:
   A. Cardiac resynchronization therapy (CRT) and implantable cardioverter-defibrillator (ICD) in NYHA class II patients
   B. Cardiac resynchronization therapy and ICD in NYHA class III patients
   C. Cardiac resynchronization therapy and ICD in NYHA class IV patients
   D. Heart transplantation in selected cases
   E. General treatment of heart failure

213. In primary non-hypertrophic restrictive cardiomyopathy:
   A. Biventricular dilation is present
   B. Biatrial dilation is present
   C. Splitting of the second heart sound may be observed
   D. Kussmaul’s sign may be observed (increased venous pressure during inspiration)
   E. Third and fourth heart sounds may be present

214. Stress cardiomyopathy (Tako-tsubo):
   A. Appears to be caused by a transient excess of catecholamines
   B. Can be treated with beta-blockers

C. May resolve completely within 3–5 weeks
D. Presents as a dilated cardiomyopathy, especially in obese women
E. Is associated with preeclampsia

215. Peripartum cardiomyopathy:
A. Affects women starting from the second trimester of pregnancy
B. Affects women in the third trimester of pregnancy
C. Manifests as hypertrophic cardiomyopathy
D. Manifests as dilated cardiomyopathy
E. Is associated with eclampsia

216. Tachycardia-induced cardiomyopathy:
A. Can be caused by prolonged periods of ventricular tachycardia
B. Can be caused by prolonged periods of supraventricular tachycardia
C. Is characterized by hypertrophic cardiomyopathy
D. Is characterized by dilated cardiomyopathy
E. Cardioversion and ablation are contraindicated

217. *The normal amount of pericardial fluid is:
A. 0–9 ml
B. 10–19 ml
C. 20–49 ml
D. 50–69 ml
E. 70–99 ml

218. *Pericardial diseases may present as the following, EXCEPT:
A. Pericardial masses
B. Constrictive pericarditis
C. Pericardial rupture
D. Acute, incessant, and chronic pericarditis
E. Pericardial effusion and cardiac tamponade

219. Common ECG abnormalities seen in acute pericarditis include:
A. Widespread ST-segment elevation with upward concavity (saddle-shaped)
B. Widespread ST-segment elevation with downward convexity (saddle-shaped)
C. Reciprocal ST-segment depression in leads aVR and V1
D. Reciprocal ST-segment depression in leads aVL and V1
E. Ashman phenomenon (alternating short and long RR intervals)

220. Which of the following represents an etiology of pericarditis:
A. Viral (Coxsackie virus, echovirus, mumps, herpes, HIV)

B. Dressler syndrome (delayed, post-myocardial infarction)
C. Myxedematous
D. Zollinger-Ellison syndrome
E. Chylopericardium

221. Which of the following medications are used in the treatment of pericarditis:
A. Etanercept (TNF-α inhibitor)
B. Nonsteroidal anti-inflammatory drugs (NSAIDs)
C. Corticosteroids
D. Aspirin
E. Methotrexate

222. First-line treatment for pericarditis consists of the following combinations:
A. Methotrexate with colchicine
B. Etanercept with colchicine
C. Aspirin with colchicine
D. Aspirin with nonsteroidal anti-inflammatory drugs (NSAIDs)
E. Nonsteroidal anti-inflammatory drugs (NSAIDs) with colchicine

223. Which of the following are manifestations of tuberculous pericarditis:
A. Kussmaul’s sign
B. Low-grade chronic fever
C. Ageusia
D. Dyspnea
E. Night sweats

224. Which of the following most commonly causes constrictive pericarditis:
A. Myocardial infarction
B. Leukemia
C. Hemopericardium
D. Tuberculosis
E. Lymphoma

225. The symptoms and signs of constrictive pericarditis occur as a result of:
A. Increased mediastinal pressure
B. Decreased mediastinal pressure
C. Increased ventricular filling
D. Decreased ventricular filling
E. Congestion of the pulmonary veins

226. Which of the following are signs or symptoms of pericardial effusion:

A. Heart sounds are diminished and distant
B. Heart sounds are accentuated
C. The apical impulse is generally obscured
D. The apical impulse is accentuated
E. Ewart's sign

227. In pericardial effusion and cardiac tamponade, echocardiographic findings include:
A. Right atrial collapse in end-systole
B. Right atrial collapse in end-diastole
C. Right ventricular collapse in early diastole
D. Right ventricular collapse in early systole
E. Interventricular septal shift toward the right ventricle during inspiration

228. In pericardial effusion and cardiac tamponade, chest X-ray typically shows:
A. Enlarged, globular or pear-shaped heart with well-defined borders
B. Enlarged, globular or apple-shaped heart with well-defined borders
C. Typically, the pulmonary veins are not dilated
D. Pulmonary veins are always dilated
E. Rossler's sign

229. *To establish the diagnosis of severe retinopathy, the presence of the following specific sign detected by direct ophthalmoscopy is required:
A. Macroaneurysms
B. Papilledema
C. Pinpoint arteriolar constriction
D. Focal venous narrowing
E. Soft exudates

230. *Target organ damage caused by arterial hypertension can be identified through the following investigations, EXCEPT:
A. Glomerular filtration rate
B. ECG
C. Echocardiography
D. Aldosterone/renin ratio
E. Fundoscopy (eye exam)

231. *The emergency management of malignant arterial hypertension involves the following therapeutic target:
A. Immediate reduction of systolic blood pressure to <140 mmHg
B. Immediate reduction of systolic blood pressure to <160 mmHg and diastolic blood pressure to <105 mmHg

C. Reduction of mean arterial pressure by 25% over a few hours
D. Immediate reduction of systolic blood pressure to 100–120 mmHg
E. Reduction of heart rate to 50–60 bpm

232. *Orthostatic hypotension refers to:
A. A sustained drop in blood pressure of more than 15 mmHg systolic or more than 10 mmHg diastolic
B. A sustained rise in blood pressure of more than 15 mmHg systolic or more than 10 mmHg diastolic
C. A sustained drop in blood pressure of more than 20 mmHg systolic or more than 10 mmHg diastolic
D. A sustained rise in blood pressure of more than 20 mmHg systolic and a drop of more than 10 mmHg diastolic
E. A sustained drop in systolic blood pressure of more than 10 mmHg and a rise in diastolic blood pressure of more than 10 mmHg

233. *The correct method for measuring blood pressure includes:
A. Legs crossed
B. Using the dominant arm (if there is a difference >15 mmHg)
C. Cuff covering >80% of the arm circumference
D. Cuff positioned above the level of the heart
E. Complete rest for 20 minutes

234. *Regarding left ventricular hypertrophy (LVH) induced by hypertension, the following statement is TRUE:
A. It is usually symptomatic
B. It can be detected as a forceful apical impulse on precordial palpation
C. It cannot be identified on a standard 12-lead electrocardiogram (ECG)
D. It cannot be detected by precordial palpation
E. It can be detected as a faintly perceptible apical impulse on precordial palpation

235. *Factors involved in the etiology of hypertension include all of the following, EXCEPT:
A. Diet
B. Sedentary lifestyle
C. Social factors
D. Labile INR
E. Medications and drugs

236. *Substances frequently involved in increasing blood pressure include:
A. NSAIDs (nonsteroidal anti-inflammatory drugs)
B. PCSK9 inhibitors

C. GLP-1 analogues
D. Fibrates
E. Bupropion

237. Adverse effects of alpha-blockers include:
A. Cough
B. Gynecomastia
C. Postural (orthostatic) hypotension
D. Bronchospasm
E. Urinary incontinence

238. Causes of secondary arterial hypertension include:
A. Hypercortisolism
B. Primary hypoaldosteronism
C. Hypothyroidism
D. Pheochromocytoma
E. Advanced liver disease

239. The following are absolute contraindications for the use of angiotensin-converting enzyme (ACE) inhibitors in the treatment of arterial hypertension:
A. History of angioedema
B. Bronchial asthma
C. Bradycardia
D. Gout
E. Bilateral renal artery stenosis

240. The following statements regarding hypertensive emergencies are true:
A. Moderate to severe retinopathy is a specific sign associated with malignant hypertension
B. Amlodipine is the calcium channel blocker of choice in the treatment of hypertensive encephalopathy
C. Acute aortic dissection requires immediate reduction of systolic blood pressure to 100–120 mmHg and heart rate to 50–60 bpm
D. The clinical picture of preeclampsia includes edema, visual disturbances, and abdominal pain
E. Transthoracic echocardiography is the investigation of choice for diagnosing acute aortic dissection

241. Among the paraclinical investigations that may be recommended for patients with suspected secondary arterial hypertension are:

A. Brain CT scan
B. Plasma metanephrine measurement
C. Liver ultrasound
D. MRI or CT angiography of the entire aorta
E. Serum TSH measurement

242. The following are adverse effects of dihydropyridine calcium channel blockers used in the treatment of arterial hypertension:
A. Hyperuricemia
B. Peripheral edema
C. Gynecomastia
D. Hyperglycemia
E. Headache

243. According to current guidelines, the initial therapy for arterial hypertension includes the following classes of antihypertensive drugs:
A. Alpha-blockers
B. Angiotensin-converting enzyme inhibitors (ACE inhibitors)
C. Calcium channel blockers
D. Thiazide-like diuretics
E. Aldosterone antagonists (mineralocorticoid receptor antagonists)

244. Regarding the treatment of arterial hypertension, the following statements are TRUE:
A. Potassium-sparing diuretics are used in the treatment of resistant hypertension
B. Labetalol is used in the initial therapy of uncomplicated arterial hypertension
C. Target blood pressure values should be below 130/80 mmHg for most patients
D. Doxazosin is a centrally acting antihypertensive agent
E. Beta-blockers are contraindicated in the presence of bronchial asthma

245. The following are dihydropyridine calcium channel blockers:
A. Nifedipine
B. Diltiazem
C. Amlodipine
D. Verapamil
E. Indapamide

246. Substances frequently involved in increasing blood pressure include:
A. Vascular endothelial growth factor (VEGF) inhibitors
B. Alcohol

C. Corticosteroids
D. Angiotensin-converting enzyme (ACE) inhibitors
E. Angiotensin II receptor blockers (ARBs)

247. The most common causes of secondary hypertension are:
A. Primary hyperaldosteronism
B. Intense physical activity
C. Secondary hyperaldosteronism
D. Obesity
E. Obstructive sleep apnea

248. Moderate hypertensive retinopathy is characterized by the following changes:
A. Hemorrhage (blot, dot, or flame-shaped)
B. Arteriovenous (AV) nicking
C. Generalized arteriolar narrowing
D. Cotton wool spots
E. Focal arteriolar narrowing

249. The threshold values for the diagnosis of Grade I arterial hypertension in the medical office are:
A. Systolic blood pressure (SBP) 160–179 mmHg
B. Systolic blood pressure (SBP) 140–159 mmHg
C. Diastolic blood pressure (DBP) 80–89 mmHg
D. Diastolic blood pressure (DBP) 90–99 mmHg
E. Diastolic blood pressure (DBP) 100–109 mmHg

250. Ambulatory blood pressure monitoring (ABPM):
A. Allows identification of different blood pressure phenotypes
B. Involves patients measuring their own blood pressure using the same device as in the office
C. Measures blood pressure intermittently over a 24-hour period
D. Provides superior diagnostic accuracy compared to office blood pressure measurements
E. Is especially useful for long-term blood pressure monitoring between office visits

251. The main mechanisms that affect blood pressure are:
A. Blood volume and vascular tone
B. Passive smoking
C. Cardiac output
D. High ambient temperature
E. A diet rich in fresh foods

252. Regarding orthostatic hypotension, the following statements are TRUE:
   A. It is common in young individuals
   B. It is more frequent in conditions associated with autonomic neuropathies
   C. It refers to a sustained drop in blood pressure of more than 20 mmHg systolic or more than 10 mmHg diastolic within 3 minutes of standing up
   D. It is usually symptomatic
   E. It may cause postural intolerance or instability

253. Dietary factors clearly associated with increased blood pressure include:
   A. High intake of unsaturated fats
   B. High salt intake
   C. High intake of vegetables and fruits
   D. Excessive intake of liquorice
   E. High intake of simple carbohydrates

254. The following statements are true regarding the impact of lifestyle modifications on blood pressure:
   A. Regular cardiovascular exercise (30 minutes daily) reduces blood pressure by an average of 5 mmHg
   B. Weight loss in overweight patients reduces blood pressure by approximately 1 mmHg per kilogram lost
   C. Reducing salt intake to less than 6 g per day lowers blood pressure by an average of 5 mmHg
   D. Quitting smoking reduces blood pressure by 7 mmHg
   E. Increased consumption of fruits and vegetables and reduced intake of saturated fats lowers blood pressure by an average of 10 mmHg

255. Indications for referring hypertensive patients to specialized medical centers include:
   A. Patients with uncontrolled (resistant) hypertension taking ≥3 different classes of antihypertensive medications
   B. When secondary causes of hypertension are suspected
   C. Normal blood pressure values but evidence of target organ damage
   D. Patient's request
   E. Patient age over 65 years

256. The following therapies are first-line treatments in the management of hypertensive emergencies:
   A. IV nitroglycerin and morphine in acute pulmonary edema
   B. IV labetalol and nicardipine in preeclampsia
   C. Thiazide diuretics in acute coronary syndrome
   D. Beta-blockers in stroke

E. ACE inhibitors in atrial fibrillation with rapid ventricular response

257. Absolute contraindications to the administration of angiotensin-converting enzyme (ACE) inhibitors include:
   A. High-degree atrioventricular block
   B. Postural (orthostatic) hypotension
   C. Bilateral renal artery stenosis
   D. Gout
   E. Angioedema

258. Which paraclinical investigations are recommended in diagnosing secondary hypertension of endocrine origin:
   A. Urinary or serum β-hCG
   B. Plasma metanephrines
   C. Serum TSH
   D. Albumin-to-creatinine ratio
   E. Low-dose dexamethasone suppression test

259. The following statements are true regarding secondary arterial hypertension:
   A. In aortic coarctation, a difference in pulse or blood pressure may be found between the upper limbs or between the upper and lower limbs
   B. In renal artery stenosis, a cardiac murmur may be present
   C. Pheochromocytoma is associated with neurofibromatosis type 1
   D. In acromegaly, pretibial myxedema, delayed relaxation of reflexes, or exophthalmos may occur
   E. Obstructive sleep apnea may present with snoring, night sweats, and morning headaches

260. Issues related to blood pressure measurement in the medical office include:
   A. A “white coat effect”
   B. The need for multiple visits to obtain enough data for clinical decision-making (cost, time)
   C. Lack of patient adherence to medical advice
   D. The need for medical personnel and healthcare facilities (cost, time)
   E. The fact that home and ambulatory blood pressure measurements are more predictive of cardiovascular events, considering that patients do not live in healthcare settings

261. What information should the medical history (anamnesis) of a patient with arterial hypertension include:
   A. Symptoms of hypertension or secondary causes
   B. Lifestyle-related aspects
   C. Family history

D. Asymptomatic target organ damage: eyes, kidneys, heart
E. Estimation of total cardiovascular risk.

ANSWERS CHAP. I - CARDIOLOGY

1	D	40	A, B, C, E	79	C, E	118	E
2	A	41	B, D	80	C	119	C, E
3	C	42	A	81	D	120	B, C, E
4	C	43	D	82	D	121	A, B, C, E
5	A	44	B	83	C	122	C, D
6	A	45	E	84	C	123	C, E
7	C	46	D	85	E	124	A, C
8	D	47	D	86	B	125	A, B, D
9	C	48	A	87	D	126	D, E
10	E	49	A, B, D, E	88	A, D	127	A, E
11	A, B, C, D	50	B, C, E	89	A, B, C, D	128	D, E
12	A, B, C, D	51	A, C, D	90	C, E	129	A, B
13	A, B, D, E	52	A, C	91	A, B, C	130	C, D, E
14	D, E	53	A, B	92	B, C	131	C, E
15	A, C, E	54	B, D, E	93	A, C	132	A, B
16	A, B	55	B, D, E	94	B, C, D	133	A, C, E
17	B, C	56	B, C, E	95	A, D	134	A, C, D, E
18	B, C	57	B, C, D	96	A, B, C	135	A, B, D
19	B, E	58	C, D, E	97	A, B, C	136	A, B, C
20	A, B, C, D	59	C, D, E	98	A, B	137	C, D, E
21	A, C	60	A, B, E	99	C, E	138	B, C
22	A, D, E	61	A, D	100	A, B, C, D	139	A, D
23	A, D, E	62	A, B, C, D	101	C, E	140	B, D
24	A, B, E	63	A, B, C	102	A, B, C	141	A, D, E
25	A, B, C	64	A, B, C	103	B, C	142	B
26	C, D	65	A, C, D, E	104	B, D, E	143	D
27	C, D	66	B, C, D	105	C, D	144	A, B, C
28	A, B, C	67	A, E	106	A, B, C, D	145	A
29	A, C, E	68	E	107	A, C, D, E	146	D
30	B, C, D	69	B	108	A, B, C	147	E
31	A, B, D, E	70	B, C, D	109	A, B, C, D	148	B
32	B, D	71	A, D, E	110	A, B	149	C
33	A, C	72	A, D	111	E	150	A
34	A, B, C, E	73	A, B	112	D	151	D
35	A, B, C	74	D, E	113	B	152	A
36	B, C, E	75	A, E	114	D	153	C
37	A, C, E	76	A, B, C, D	115	A	154	A, B, C
38	A, C	77	A, B	116	E	155	A, B, C, D
39	B, C, D, E	78	B, C, D	117	B	156	D, E
157	A, B, C, E	196	B, D, E	235	D		
158	B, D	197	A, B, C	236	A		

159 A, B, D
160 B, C, D
161 A, C
162 A, C, D
163 C, E
164 B, C, E
165 C, D, E
166 B, C, D
167 B, D
168 A, D, E
169 B, C
170 A, B, C
171 A, B, C
172 A, C, D
173 A, B, D
174 A, B, D
175 B, E
176 A, C, D
177 A, B, C, E
178 A, C, D
179 B, C, D
180 A, C, D
181 A, C, E
182 A, C, D
183 A, B, C
184 A, B, D
185 A, C, E
186 A, D
187 A, B, D, E
188 A, B, C, D
189 C, D, E
190 A, B, C, D
191 A, B, C, D
192 A, B, C, D
193 B, C, D, E
194 A, B, C, D
195 D, E
198 E
199 A
200 A
201 A
202 D
203 B
204 D
205 B, C, D
206 A, C
207 A, B, E
208 C, D
209 A, B, C
210 C, D, E
211 A, B, C, D
212 B, C, D, E
213 B, D, E
214 A, B
215 B, D
216 A, B, D
217 C
218 C
219 A, C
220 A, B, C, E
221 B, C, D
222 C, E
223 B, D, E
224 C, D
225 D, E
226 A, C, E
227 B, C
228 A, C
229 B
230 D
231 C
232 C
233 C
234 B
237 C, E
238 A, C, D
239 A, E
240 A, C, D
241 B, D, E
242 B, E
243 B, C, D
244 A, C, E
245 A, C
246 A, B, C
247 A, D, E
248 A, D
249 B, D
250 A, C, D
251 A, C
252 B, C, E
253 B, D, E
254 A, B, C, E
255 A, B, C
256 A, B
257 C, E
258 B, C, E
259 A, C, E
260 A, B, D, E
261 A, B, C

CHAP. II - DIABETES, NUTRITION, METABOLIC DISEASES AND RHEUMATOLOGY

1. The following statements about insulin are true:
   A. It is a peptide hormone
   B. It is a sterol hormone
   C. It is synthesized in the alpha cells of pancreatic islets of Langerhans
   D. It is synthesized in the beta cells of pancreatic islets of Langerhans
   E. It is secreted at a slow basal rate throughout the day

2. The pathogenic mechanisms involved in the etiopathogenesis of type 2 diabetes mellitus are:
   A. Genetic susceptibility and heredity
   B. Obesity
   C. Sedentarism
   D. Abnormalities of insulin action
   E. Insulin secretion abnormalities

3. * In the etiopathogenesis of type 1 diabetes mellitus is involved:
   A. Increased liver glucose production
   B. Insulin resistance
   C. Sedentarism
   D. Autoimmune destruction of islet beta cells
   E. Obesity

4. Characteristics of type 2 diabetes are:
   A. Severe, absolute insulin deficiency
   B. Weight loss usually absent
   C. It is commonly associated with other autoimmune diseases
   D. Persistence of C-peptide
   E. Age at onset usually >30 years

5. Dietary factors involved in the development of type 1 diabetes are:
   A. Enteroviruses
   B. Early introduction of cow's milk in the diet
   C. Relative vitamin D deficiency
   D. Environmental toxins
   E. Psychological stress

6. The following statements about transient neonatal diabetes are true:
   A. Appears shortly after birth

B. Results from abnormalities in insulin release
C. Results from the destruction of beta cells
D. Can be successfully treated with biguanides
E. Can be successfully treated with sulfonylureas

7. In the etiopathogenesis of type 2 diabetes mellitus, the abnormalities of insulin action consist in its inability to:
   A. Inhibit liver glucose production
   B. Boost glucose uptake in skeletal muscle
   C. Inhibit glucose uptake in skeletal muscle
   D. Suppresses lipolysis in adipose tissue
   E. Boost lipolysis in adipose tissue

8. Dietary patterns associated with a lower risk of developing type 2 diabetes are:
   A. Increased intake of fruit and vegetables
   B. Dietary saturated fat intake
   C. Fried food consumption
   D. Drinking drinks sweetened with sugar
   E. Fermented dairy products

9. * Insulin resistance is:
   A. Inability of insulin to produce low biological effects at physiological concentrations
   B. Inability of insulin to produce usual biological effects at physiological concentrations
   C. Inability of insulin to produce increased biological effects at physiological concentrations
   D. Inability of insulin to produce low biological effects at pathological concentrations
   E. Inability of insulin to produce usual biological effects at pathological concentrations

10. The following statements about the role of obesity in the etiology of type 2 diabetes are true:
   A. Increases the risk of type 2 diabetes by up to 30-50 times
   B. Increases the risk of type 2 diabetes by up to 80-100 times
   C. It accounts for 50-60% of the overall risk of developing type 2 diabetes
   D. It accounts for 80-85% of the overall risk of developing type 2 diabetes
   E. Central fat distribution increases risk of type 2 diabetes

11. The prevalence of type 2 diabetes is rapidly increasing due to:
   A. Population growth
   B. Population decline
   C. Increasing life expectancy
   D. Declining life expectancy
   E. More effective diagnosis

12. * Type 1 diabetes mellitus represents:
    A. 1-3% of all diabetes cases
    B. 5-10% of all diabetes cases
    C. 20-30% of all diabetes cases
    D. 50-60% of all diabetes cases
    E. About 90% of all diabetes cases

13. *The main organ involved in the homeostasis of glucose is:
    A. Liver
    B. Kidneys
    C. Brain
    D. Muscle tissue
    E. Adipose tissue

14. Over 90% of the approximately 200g of glucose used daily comes from:
    A. Liver glycogen
    B. Liver gluconeogenesis
    C. Renal gluconeogenesis
    D. Glycogenolysis
    E. Gluconeogenesis

15. Which of the following statements regarding the incretin hormones (glucagon like peptide-1 and glucose-dependent insulinotropic polypeptide) are true?
    A. Are released from the gastrointestinal tract after the ingestion of food
    B. Decrease the secretion of insulin from the beta cells
    C. Increase the secretion of glucagon
    D. Slow gastric emptying
    E. Are degraded within minutes mainly by the enzyme dipeptidyl peptidase-4

16. Sodium-glucose transporter 2:
    A. Is a sodium-dependent glucose transport protein
    B. Is localized in the proximal renal tubules
    C. Is localized in the distal renal tubules
    D. Puts glucose back into circulation
    E. Removes glucose from the circulation

17. *Select the long-acting insulin analog from the following types of insulins:
    A. Lispro
    B. Aspart
    C. Glargine
    D. NPH

E. Glulisine

18. *Choose the correct diagnostic criterion for diabetes mellitus, in terms of fasting blood glucose according to the World Health Organization?
    A. ≥7.0 mmol/l (126 mg/dl)
    B. <6.1 mmol/l (110 mg/dl)
    C. ≥11.1 mmol/l (200 mg/dl)
    D. ≥7.8 mmol/l (140 mg/dl)
    E. ≥10 mmol/l (180 mg/dl)

19. *Severe hypoglycemia is defined as:
    A. A blood glucose below 4.0 mmol/l (70 mg/dl)
    B. A blood glucose below 3.0 mmol/l (54 mg/dl)
    C. A blood glucose below 5.6 mmol/l (100 mg/dl)
    D. Hypoglycemia for which the patient requires help from another person to recover
    E. A blood glucose between 3.0-4.0 mmol/l (54-70 mg/dl)

20. *The first line therapy for people with type 1 diabetes is:
    A. Insulin in combination with sulfonylurea
    B. Basal insulin
    C. Metformin
    D. Basal-bolus insulin therapy
    E. The twice-daily premixed insulin regimen

21. Diagnostic criteria for diabetes mellitus, according to the World Health Organization, include:
    A. Fasting blood glucose≥ 6.1 mmol/l (110 mg/dl)
    B. 2-hour post load blood glucose (during the oral glucose tolerance test) ≥ 7.8 mmol/l (140 mg/dl)
    C. HbA_{1c}≥ 6.5% (48 mmol/mol)
    D. Fasting blood glucose≥ 7.0 mmol/l (126 mg/dl)
    E. Random blood glucose≥ 11.1 mmol/l (200 mg/dl)

22. Autonomic symptoms of hypoglycemia are:
    A. Sweating
    B. Tremor
    C. Decreased ability to concentrate
    D. Speech disorders
    E. Anxiety

23. Side effects of insulin therapy include:
    A. Hypoglycemia
    B. Weight loss
    C. Weight gain
    D. Lipohypertrophy
    E. Diarrhea

24. Choose the true statements about physical activity in patients with diabetes:
    A. It also has the benefit of lowering insulin requirement
    B. It improves glycemic control
    C. It reduces life expectancy
    D. At least 150 minutes of aerobic exercise and resistance training per week, spread over a period of at least 3 days, is recommended
    E. Unscheduled exercise can precipitate an episode of hypoglycemia

25. Choose the true statements about diet in the treatment of patients with diabetes:
    A. It plays an insignificant role in patients with type 1 diabetes mellitus
    B. The intake of high glycemic index foods is encouraged
    C. It is recommended to reduce the consumption of refined carbohydrates and sugar-sweetened drinks
    D. Diet should be individualized according to the patient's personal and cultural preferences
    E. It is recommended to replace saturated fats with unsaturated fats and limit the intake of trans fatty acids

26. The classic symptoms of diabetes are:
    A. Polyuria
    B. Dysuria
    C. Polydipsia
    D. Weight loss
    E. Peripheral gangrene

27. The management of severe hypoglycemia is represented by:
    A. Oral glucose intake
    B. Glucagon administered intramuscular
    C. Administration of intravenous glucose solution
    D. Intake of 15-20 g of fast-absorbing carbohydrates
    E. Drinking a sugar-sweetened drink

28. The precipitating factors of hypoglycemia in patients with diabetes are:
    A. Injecting a higher dose of insulin than required
    B. Unscheduled physical exercise

C. Excessive carbohydrate intake
D. Excessive alcohol consumption
E. Errors in the insulin administration

29. Common sites of subcutaneous insulin administration are:
A. The abdominal wall
B. The outer parts of the forearms
C. The anterior and upper parts of the thighs
D. The anterior parts of the calfs
E. The buttocks

30. From the following insulin preparations, choose the short-acting insulin analogs:
A. Lispro
B. Degludec
C. Aspart
D. Detemir
E. Glulizin

31. Choose the true statements about insulin in the treatment of diabetes:
A. In patients with type 2 diabetes, insulin treatment is essential for survival
B. Most insulin preparations have a concentration of 100 IU/mL
C. The use of short-acting insulin analogs in people with type 1 diabetes mellitus reduces total and nocturnal hypoglycemic episodes and improves glycemic control
D. A significant benefit of insulin treatment is weight loss
E. Insulin degludec is a short-acting insulin

32. The goals of diabetes control and treatment are:
A. To decrease the risk of long-term complications
B. To avoid iatrogenic side effects such as hypoglycemia
C. To prevent diabetic emergencies such as diabetic ketoacidosis
D. To achieve a fasting blood glucose <4.0 mmol/L (70 mg/dL)
E. To treat the symptoms of hyperglycemia

33. Side effects of metformin include:
A. Hypoglycemia
B. Abdominal discomfort
C. Nausea
D. Diarrhea
E. Weight gain

34. *Metformin should be stopped if the estimated glomerular filtration rate (eGFR) is:

A. <30 mL/min/1.73 m^2
B. >35 mL/min/1.73 m^2
C. <40 mL/min/1.73 m^2
D. >40 mL/min/1.73 m^2
E. <45 mL/min/1.73 m^2

35. *The mechanism of action of sulfonylureas is:
A. Inhibition of the enzyme dipeptidyl peptidase-4 (DPP4)
B. Acts on β-cells to induce insulin secretion
C. Increased urinary glucose excretion
D. Inhibition of alpha-glucosidase
E. Increase incretin effect by activating the GLP-1 receptor

36. *The mechanism of action of thiazolidindiones is:
A. Increased urinary glucose excretion
B. Inhibition of the enzyme dipeptidyl peptidase-4 (DPP4)
C. Acts on β-cells to induce insulin secretion
D. Reducing insulin resistance by interacting with the PPAR-γ receptor
E. Inhibition of alpha-glucosidase

37. The following drugs belong to the sodium-glucose transporter 2 inhibitor class:
A. Dapagliflozin
B. Sitagliptin
C. Empagliflozin
D. Dulaglutide
E. Canagliflozin

38. In addition to their effects on blood glucose, sodium-glucose transporter 2 (SGLT2) inhibitors also have the following benefits:
A. Decrease body weight
B. Increase body weight
C. Improve kidney dysfunction
D. Reduce the risk of atherosclerotic cardiovascular events
E. Increase risk of heart failure

39. Adverse effects of sodium-glucose transporter 2 (SGLT2) inhibitors include:
A. Hypoglycemia
B. Nausea and vomiting
C. Abdominal discomfort
D. Genital candidiasis
E. Dehydration

40. They belong to the GLP-1 receptor agonist class:
    A. Exenatide
    B. Liraglutide
    C. Dapagliflozin
    D. Dulaglutide
    E. Semaglutide

41. *The first line of treatment for the majority of people with type 2 diabetes, whose blood glucose levels remain above target despite lifestyle optimization, is:
    A. Dulaglutide
    B. Metformin
    C. Sitagliptin
    D. Dapagliflozin
    E. Gliclazide

42. If the patient with type 2 diabetes mellitus is diagnosed with established atherosclerotic cardiovascular disease, it is recommended to take:
    A. GLP-1 receptor agonist with proven cardiovascular benefits
    B. Sodium-glucose transporter 2 inhibitor with proven cardiovascular benefits
    C. Thiazolidinediones
    D. Meglitinide
    E. Sulfonylureas

43. The following drugs belong to the dipeptidyl peptidase-4 (DPP4) inhibitor class:
    A. Sitagliptin
    B. Dapagliflozin
    C. Saxagliptin
    D. Empagliflozin
    E. Vildagliptin

44. Clinical studies have shown that the use of CGM (continuous glucose monitoring) has the following benefits:
    A. Improves glycated hemoglobin (HbA1c)
    B. Reduces glycemic variability
    C. Increases glycemic variability
    D. Lowers the risk of hypoglycemia
    E. Increases the risk of hypoglycemia

45. Side effects of sulfonylureas include:
    A. Abdominal discomfort

B. Hypoglycemia
C. Weight gain
D. Nausea, vomiting
E. Urinary tract infections

46. The risk of hypoglycemia, when taking sulfonylureas, is higher if:
A. Taking longer-acting sulfonylureas
B. Excessive alcohol intake
C. Older patients
D. During intercurrent infections
E. Young patients

47. The main classes of drugs used in the treatment of type 2 diabetes are:
A. Biguanide (metformin)
B. Sodium-glucose transporter 2 inhibitors
C. Statins
D. Fibrates
E. GLP-1 receptor agonists

48. Long-term assessment of metabolic control is achieved by:
A. Determination of glycated hemoglobin (HbA1c)
B. Capillary blood glucose self-monitoring
C. Continuous glucose monitoring
D. Determination of fructosamine
E. Fasting blood glucose determination

49. * Isolated cranial nerve III arising from diabetes mellitus is characteristic:
A. Distal symmetric polyneuropathy
B. Acute painful neuropathy
C. Diabetic mononeuritis
D. Diabetic amyotrophy
E. Autonomic neuropathy

50. * Charcot arthropathy is a complication of:
A. Chronic arteriopathy of the lower limbs
B. Rheumatoid arthritis
C. Hyperuricemia
D. Cellulitis
E. Severe neuropathy in diabetes mellitus

51. * Which of the following pharmacologic agents used in the treatment of diabetes reduces the risk of heart failure?
    A. GLP-1 receptor agonists
    B. SGLT2 inhibitors
    C. Tiazolidindionele
    D. DPP4 inhibitors
    E. Sulfonylureas

52. *Which of the following antihypertensive pharmacologic agents are associated with additional benefits in the therapeutic approach to cardiovascular risk in patients with diabetes mellitus?
    A. Angiotensin converting enzyme inhibitors
    B. Calcium channel blockers
    C. Thiazide diuretics
    D. Loop diuretics
    E. Alpha-blockers

53. Which of the following statements about early clinical signs of diabetic neuropathy are true?
    A. They are mainly sensory
    B. They are mainly motor
    C. They include loss of vibratory sensitivity
    D. Include loss of thermal sensitivity
    E. They often include symptoms that start in the hands

54. Impairment of the cardiovascular system in the autonomic neuropathy of diabetes mellitus is characterized by the occurrence of:
    A. Resting bradycardia
    B. Resting tachycardia
    C. Postural hypotension
    D. Postural hypertension
    E. Some altered cardiovascular reflexes

55. A lesion with predominantly ischemic etiology in a diabetic foot has the following distinctive features:
    A. It's usually painless
    B. Associated with trophic changes
    C. Peripheral pulses are easily detectable
    D. On palpation, a cold tegument is revealed
    E. It's often associated with a claw-toed look

56. Which of the following clinical manifestations may be encountered in autonomic neuropathy in diabetes mellitus?
    A. Gastroparesis
    B. Carpal tunnel syndrome
    C. Interosseous muscular atrophies
    D. Stuffy bladder
    E. Diarrhea chairs

57. Which of the following pharmacologic agents can be used to reduce neuropathic pain perception in diabetic neuropathy?
    A. Duloxetine
    B. Gabapentin
    C. Valsartan
    D. Pregabalin
    E. Dapagliflozin

58. Atherosclerotic cardiovascular disease in patients with diabetes mellitus has the following characteristics:
    A. Tends to affect more proximal vessels
    B. Tends to affect more distal vessels
    C. Appears at a younger age
    D. Appears at an older age
    E. It's more diffuse

59. Which of the following statements about the diabetic foot are true?
    A. Foot health screening should be performed at least once every 5 years
    B. The formation of a multidisciplinary team for diabetic foot management is recommended
    C. Screening for foot disorders includes history of previous or current ulcerations
    D. Screening for foot conditions includes clinical examination of the foot
    E. A reproducible method to assess sensitivity is by testing it with the monofilament

60. Which of the following pharmacologic agents can be used in patients with diabetes mellitus to achieve the therapeutic LDL cholesterol target?
    A. Statins
    B. Ezetimibe
    C. Alpha-glucosidase inhibitors
    D. PCSK9 inhibitors
    E. Meglitinides

61. Principles of diabetic foot care include:
    A. Daily foot inspection

B. Moisturizing dry skin
C. Checking footwear for sharp objects or irregular surfaces before wearing
D. Checking the bath water temperature before entering
E. Treating infections and calluses at home without specialist help

62. Which of the following statements about the association between infections and diabetes are true?
A. Hyperglycemia has no influence on the occurrence and prognosis of infections
B. Some micro-organisms are more virulent in hyperglycemic environments
C. Urinary tract infections and asymptomatic bacteriuria are more common in patients with autonomic neuropathy
D. Tuberculosis risk is lower in patients with diabetes
E. Certain viral infections increase the risk of developing diabetes

63. Which of the following pharmacologic agents are recommended for their protective effects in patients with type 2 diabetes mellitus and cardiovascular disease?
A. Sulfonylureas
B. GLP-1 receptor agonists
C. SGLT2 inhibitors
D. Thiazolidinediones
E. Meglitinides

64. Which of the following sentences about diabetic ketoacidosis (DKA) are true?
A. It occurs more frequent in people with type 1 diabetes
B. Mortality is higher in older people
C. The most important biochemical abnormalites in DKA are adipose tissue lipolysis and uncontrolled hepatic ketogenesis
D. It does not occur in people with type 2 diabetes
E. It is a life-threatening metabolic emergency

65. *Ketosis is defined by:
A. Elevated transaminases
B. Increased levels of plasma ketone bodies in the absence of acidosis
C. Increased levels of plasma ketone bodies in the presence of acidosis
D. Decreased protein synthesis
E. Serum pH values >7.45

66. Regarding the hyperosmolar hyperglycemic state, the following statements are true:
A. There is an absolute indication for subsequent insulin therapy
B. The characteristic signs and symptoms are dehydration and stupor
C. The first therapeutic measure taken is the administration of insulin

D. It is an acute metabolic complication characteristic of patients with type 2 diabetes
E. Serum pH is normal.

67. What are the indicators of severe diabetic ketoacidosis?
A. Hyperkalemia (>8 mmol/L) at presentation
B. Bicarbonate >15 mmol/L
C. Ketonemia >6 mmol/L
D. pH <7.3
E. Peripheral pulse >100 beats/minute or <60 beats/minute

68. *In diabetic ketoacidosis, bicarbonate treatment is administered only if the serum pH is:
A. Greater than 7.15
B. Between 7.20-7.35
C. Less than 7.0
D. Between 7.0-7.25
E. Whatever its value

69. Which of the following statements about lactic acidosis is true?
A. It may occur in patients treated with metformin
B. Usually, hyperglycemia and ketosis are significant
C. The anion gap is important
D. Mortality is >50%
E. Lactic acid levels are normal

70. Diabetic ketoacidosis is characterized by:
A. Hyperglycemia (>200 mg/dL) or known diabetes
B. Ketonemia (≥ 3 mmol/L) or significant ketonuria
C. Hypoglycemia (<70 mg/dl)
D. Bicarbonate (HCO_3^-) <15 mmol/L
E. venous pH >7.45

71. *In the treatment of hyperosmolar hyperglycemic state, to prevent cerebral damage, the decrease of glycemia should be no higher than:
A. 150 mg/dl per hour
B. 200 mg/dl per hour
C. 180 mg/dl per hour
D. 90 mg/dl per hour
E. 120 mg/dl per hour

72. Which of the following are ketone bodies?

A. 3-hydroxybutyric acid
B. Acetone
C. Ascorbic acid
D. Aspartic acid
E. Acetoacetic acid

73. As for the treatment of diabetic ketoacidosis:
A. Taking insulin is mandatory
B. There is no need to treat the underlying cause
C. Low-molecular-weight heparin should be considered in the prophylaxis of thromboembolism in elderly or high-risk patients, irrespective of the absence or presence of contraindications
D. Fluid leak replacement is the first measure taken
E. Potassium is administered regardless of its serum value

74. What are the acute metabolic complications of diabetes?
A. Diabetic retinopathy
B. Lactic acidosis
C. Diabetic ketoacidosis
D. Hyperosmolar hyperglycemic state
E. Diabetic nephropathy

75. Which of the following statements regarding the hyperosmolar hyperglycemic state are true?
A. Insulin deficiency is less severe than in diabetic ketoacidosis
B. It is usually encountered in patients with type 1 diabetes mellitus
C. Fluid replacement is the most important aspect of treatment
D. It usually affects elderly patients
E. Bicarbonate administration is mandatory

76. Which of the following statements about diabetic ketoacidosis (DKA) are true?
A. Kussmaul-type breathing becomes less marked in very severe acidosis due to respiratory depression
B. The first therapeutic measure taken is insulin administration
C. The clinical picture includes nausea, vomiting, asthenia and obnubilation
D. Treatment should be given in an intensive care unit if the patient has severe DKA
E. The insulin deficiency is notable

77. Which of the following affirmations about ketonuria are true?
A. It represents increased levels of ketone bodies in the blood
B. Occurs after a period of fasting in patients without diabetes
C. Is part of the diagnostic criteria for diabetic ketoacidosis

D. It can also occur in patients with relatively well-controlled type 1 diabetes mellitus
E. Represents detectable levels of ketone bodies in urine

78. In which of the following circumstances can diabetic ketoacidosis occur in people with type 2 diabetes mellitus?
A. Infections
B. Poor nutrition
C. Newly diagnosed diabetes mellitus
D. Stopping insulin treatment
E. Acute pancreatitis

79. * Which of the following statements about diabetic ketoacidosis (DKA) is true?
A. It's a chronic complication of diabetes
B. It is not encountered in patients with type 1 diabetes mellitus
C. It is a state of uncontrolled anabolism associated with a marked insulin deficiency and an increase in counter-regulatory hormones
D. DKA patients are at risk of thromboembolism
E. Most of the time it doesn't require any treatment at all

80. The following are true about the microvascular complications of diabetes:
A. They target the eyes
B. They target the kidneys
C. They increase the risk of acute myocardial infarction
D. Mostly affect patients with type 1 diabetes in the first 10 years of the disease
E. They increase the risk of stroke

81. *What is the main factor involved in the development of microvascular complications of diabetes?
A. Duration and degree of hypoglycemia
B. Duration and degree of hyperglycemia
C. Race
D. Genetic polymorphism
E. No answer is correct

82. * Which of the following is the most common chronic complication of diabetes?
A. Diabetic neuropathy
B. Diabetic nephropathy
C. Diabetic retinopathy
D. Diabetic maculopathy
E. Diabetic foot

83. Select the defining elements of the preproliferative form of diabetic retinopathy :
    A. Venous dilatations/venous loops
    B. Microvascular intraretinal abnormalities
    C. Round, multiple, deep bleeding
    D. Cotton wool stains
    E. Neovascularization

84. *Theantihypertensive medication of choice in diabetic kidney disease is:
    A. Angiotensin converting enzyme inhibitors
    B. Thiazide diuretics
    C. Ca channel blockers
    D. Beta-blockers
    E. Loop diuretics

85. * Which of the following statements about laser photocoagulation is true?
    A. Can be used from the early stages of diabetic retinopathy to stop the progression
    B. It is used in about 50% of patients with diabetes mellitus
    C. It is used only from the stage of proliferative retinopathy
    D. Improves night vision
    E. Broadens your field of vision

86. In determining the severity of diabetic retinopathy can be used:
    A. Fluorescein angiography
    B. Optical coherence tomography
    C. Digital microscope
    D. Ophthalmoscope
    E. Autorefractometer

87. Diabetes can also affect the eyeballs in the following ways:
    A. Earlier cataract development than in the general population
    B. Refractive defects following episodes of hypoglycemia
    C. External ocular pareses which are usually permanent
    D. External ocular pareses which are usually temporary
    E. Higher prevalence of open-angle glaucoma

88. How is diabetic nephropathy characterized?
    A. Gradual increase in urinary creatinine excretion
    B. Gradual increase in urinary albumin excretion
    C. Gradual increase in blood pressure
    D. Gradual decrease in blood pressure
    E. Decreased glomerular filtration rate.

89. Which of the following about diabetic nephropathy is true?
    A. It is the most common cause of premature death in young people with diabetes
    B. It is rapidly progressive in young patients
    C. Usually occurs 15-25 years after diagnosis of diabetes
    D. Increases cardiovascular risk
    E. It rarely becomes terminal because most patients die from cardiovascular disease

90. What are the pathophysiologic mechanisms involved in diabetic nephropathy?
    A. Renal hypertrophy due to increased glomerular filtration rate is the earliest functional abnormality
    B. The efferent arteriole becomes more dilated than the afferent arteriole
    C. The afferent arteriole becomes more dilated than the efferent arteriole
    D. Increased intraglomerular filtration pressure
    E. Glomerular capillary injury

91. Which of the following statements about albuminuria are true:
    A. The amount of urinary albumin is too small to be detected on standard urine strips in microalbuminuria
    B. From the stage of persistent proteinuria, end-stage kidney disease occurs in 5-10 years if there is an increase in serum creatinine
    C. Marked proteinuria may induce transient nephrotic syndrome
    D. Up to 50% of patients with type 1 diabetes have non-classical diabetic nephropathy
    E. A small number of patients with type 2 diabetes have non-classical diabetic nephropathy

92. The progression of diabetic nephropathy can be slowed by:
    A. Early initiation of aggressive antihypertensive treatment
    B. Administration of antihyperglycemic agents with renal elimination (glibenclamide, metformin)
    C. Administration of therapeutic agents such as SGLT2 inhibitors, where possible
    D. Careful glycemic control
    E. Taking antihypertensive therapeutic agents such as Ca channel blockers

93. How to screen for diabetic nephropathy?
    A. By regularly testing the urine of patients with diabetes
    B. By regularly testing serum creatinine levels
    C. By testing every 3 months
    D. By testing every 6 months
    E. If microalbuminuria is detected, the test must be repeated twice

94. The following changes occur in diabetic maculopathy:

A. Hard exudates within the surface of macula
B. Lines or circles of exudate within the surface of two disks of the macula
C. Multiple, round bleeding
D. Retinal fibrosis
E. Cotton wool stains

95. Identify the true statements about end-stage renal disease in diabetes mellitus:
A. Outpatient chronic peritoneal dialysis may be preferred
B. Vascular shunts calcify quickly
C. Hemodialysis is preferred
D. Kidney transplant is impossible
E. Kidney transplants are possible, but have a slightly higher failure rate than in patients without diabetes

96. *Which of the following is one of the non-articular manifestations of Rheumatoid Arthritis (RA)?
A. Raynaud's syndrome
B. Rheumatoid nodules
C. Heberden Nodes
D. Hematoxylin bodies
E. Glass esophagus

97. * Which joints are most commonly affected in rheumatoid arthritis (RA)?
A. Sacroiliac
B. Small joints of the hand
C. Large
D. Distal interphalangeal
E. Thoracic spine

98. *What is rheumatoid factor (RF)?
A. Lupus erythematosus cell
B. A neutrophilic
C. Immunoglobulin
D. A lymphocyte
E. Eosinophil

99. *In rheumatoid arthritis (RA), what is the duration of the arthritis included in the positive diagnostic criteria?
A. 3 weeks
B. 4 weeks
C. 1 week

D. 6 weeks
E. 5 weeks

100. *To establish a definite diagnosis of Rheumatoid Arthritis (RA) according to the 2010 ACR/EULAR criteria, how many points must be present in the same patient?
A. 5 out of 10
B. 3 of 6
C. 6 out of 10
D. 4 of 6
E. 6 of 7

101. * Which joints are usually spared in rheumatoid arthritis (RA)?
A. Metatarsophalangeal
B. Proximal interphalangeal
C. Distal interphalangeal
D. Knees
E. Metatarsophalangeal

102. *Which of the following are not part of the treatment of Rheumatoid Polyarthritis (RA)?
A. Methotrexate
B. Leflunomide
C. Glucocorticoids
D. Sulfonylureas
E. Nonsteroidal anti-inflammatory drugs

103. Which of the following statements about rheumatoid arthritis (RA) are true?
A. It's a chronic inflammatory rheumatic disease
B. Causes joint inflammation and tissue damage
C. Particularly affects the sacroiliac joints
D. Accompanied by multiple systemic manifestations
E. Usually starts with pain in the lumbosacral or buttock area

104. Which of the following autoimmunity elements' presence is characteristic to rheumatoid arthritis (RA)?
A. Rheumatoid factor (RF)
B. HLA B27
C. Anti-citrullinated protein autoantibodies (ACPA)
D. Wolf cell
E. Raynaud's syndrome

105. The etiology of rheumatoid arthritis (RA) involves:

A. Genetic factors
B. Hypertension
C. Autoimmunity
D. Smoking
E. Infectious agents

106. What is Felty Syndrome?
A. Rheumatoid arthritis (RA)
B. Scleroderma
C. Splenomegaly
D. Neutropenia
E. Raynaud's syndrome

107. The 2010 ACR/EULAR diagnostic criteria for rheumatoid arthritis (RA) includes:
A. Joint damage
B. Presence of the lupus cell
C. Duration of synovitis
D. Acute-phase reactants (markers of inflammatory syndrome - ESR, CRP)
E. Presence of anemia.

108. Rheumatoid arthritis (RA):
A. It is more common in females
B. It's a degenerative disease
C. It's a chronic inflammatory disease
D. Most commonly affects the joints of the spine
E. Most commonly affects the small joints of the hands

109. In rheumatoid arthritis (RA) the affected joints are:
A. Metacarpophalangeal
B. Proximal interphalangeal
C. Distal interphalangeal
D. Metatarsophalangeal
E. Lumbosacral

110. What joint deformities can occur in rheumatoid arthritis (RA)?
A. Boutonniere deformity
B. Gout tophi
C. Swan neck deformity
D. Heberden nodules
E. Dactylitis

111. What investigations are needed to establish the diagnosis of rheumatoid arthritis (RA)?
    A. Acute phase reactants (ESR, CRP)
    B. Hemoglobin A1C
    C. Joint X-rays
    D. Serology (FR, ACPA)
    E. Synovial fluid analysis

112. Treatment of Rheumatoid arthritis (RA) involves:
    A. Glucocorticoids
    B. Bronchodilators
    C. Nonsteroidal anti-inflammatory drugs
    D. Biguanide
    E. Methotrexate

113. Types of clinical involvement in rheumatoid polyarthritis (RA):
    A. Chronic
    B. Mutilating arthritis
    C. Rapidly progressive
    D. Palindromic
    E. Transient

114. The subcutaneous rheumatoid nodules that occur in rheumatoid polyarthritis (RA) are:
    A. Ferm
    B. Soft
    C. Very painful
    D. Sometimes it lets out a white magma
    E. Generally occur at pressure points

115. What side effects can occur after taking glucocorticoids?
    A. Diabetes mellitus
    B. Increases in total cholesterol values
    C. Osteoporosis
    D. Increased blood pressure values
    E. Increased uric acid values

116. Which of the following statements about Methotrexate is true?
    A. It has no side effects
    B. It is a mainstay medicine in Rheumatoid arthritis (RA)
    C. It is included in the treatment for high blood pressure
    D. May cause altered liver enzyme levels, requiring them to be monitored
    E. Can change the bloodcount values

117. Which of the preparations below are biological agents used in the treatment of Rheumatoid arthritis (RA)?
   A. Metformin
   B. Tocilizumab
   C. Abatacept
   D. Rituximab
   E. Enalapril

118. According to the ACR/EULAR 2011 definition, remission of rheumatoid arthritis (RA) involves:
   A. Nail dystrophy
   B. Number of painful joints (including feet and ankles) < 1
   C. Sacroiliac joint damage
   D. Number of swollen joints (including feet and ankles) <1
   E. PCR <l mg/L

119. What non-articular manifestations can rheumatoid arthritis (RA) cause?
   A. Pleural effusion
   B. Distal interphalangeal impingement
   C. Scleritis
   D. Cutaneous vasculitis
   E. Endocarditis

120. The following changes occur in the legs in rheumatoid polyarthritis (RA):
   A. Hammer toes
   B. The foot becomes flat
   C. Calluses and ulcers under the metatarsal ends
   D. Loss of the medial longitudinal arch of the foot
   E. Syndesmophytes

121. The features of joint damage in rheumatoid arthritis (RA) are:
   A. Pain and redness are more pronounced in the morning
   B. Onset with bilateral lower back pain
   C. Pain and soreness after physical exertion
   D. Affected joints are usually warm and painful
   E. Movement limitation occurs

122. What joint deformities can occur in the hands in rheumatoid arthritis (RA)?
   A. Ulnar deviation
   B. Heberden's nodules at the distal interphalangeal joints

C. Swan neck deformity
D. Boutonniere deformity
E. Atlanto-axial subluxation

123. *What is the radiologic appearance of psoriatic arthritis?
A. Marginal joint erosions
B. The undertow of the hallucination Subluxation of the hallux
C. Syndesmophytes
D. Central articular erosions with a 'pencil in cup appearance
E. Calcification of the interspinous ligaments in the spine

124. *What is the therapeutic target in hyperuricemia?
A. Decrease and maintain uric acid below 6.05 mg/dl in all patients
B. Decrease in uric acid below 8 mg/dl in patients with chronic kidney disease
C. Decrease in uric acid below 7 mg/dl
D. Lowering and maintaining uric acid below 7 mg/dl in patients with recurrent gout attacks
E. Maintenance of uric acid value in asymptomatic elderly patients

125. *Which of the following statements about pegloticase are true?
A. It is administered orally
B. It is indicated for hypertensive patients with gout
C. It is indicated for patients with gout and metabolic syndrome
D. It is reserved for patients with severe, refractory gout
E. Injected into the affected joint

126. * Very early diagnosis of ankylosing spondylitis is possible by:
A. Conventional X-ray
B. Gadolinium nuclear magnetic resonance
C. Doppler ultrasonography
D. Elastography
E. Angiographies

127. *In ankylosing spondylitis, the treatment recommended as first-line symptom control is:
A. Oral glucocorticoids
B. Intravenous glucocorticoids
C. Nonsteroidal anti-inflammatory drugs
D. Methotrexate
E. Allopurinol

128. Which of the following are clinical manifestations of psoriatic arthritis?
A. Dactilitis

B. Initially asymmetric polyarthritis
C. Early cervical spine involvement
D. Early lumbar spine involvement
E. Cervical spondylosis

129. Therapeutic recommendations in psoriatic arthritis include:
A. Methotrexate, proven to slow the development of joint damage
B. Nonsteroidal anti-inflammatory drugs or painkillers for pain relief
C. Anti-TNF-alpha agents in patients without therapeutic response to methotrexate
D. Hydroxychloroquine as first therapeutic option
E. Intra-articular glucocorticoid injections

130. What triggers reactive arthritis?
A. Bacillary dysentery
B. Candidiasis
C. Chlamydia trachomatis
D. Non-specific urethritis in men
E. Non-specific cervicitis in women

131. Clinical manifestations of reactive arthritis include:
A. Acute symmetric polyarthritis
B. Achilles tendon enthesitis
C. Sacroiliitis and spondylitis in susceptible people
D. Painful, prominent and often confluent plaques and pustules
E. Balanitis circinata

132. Which of the following are HLA-B27-associated spondylarthritis?
A. Ankylosing spondylitis
B. Reactive arthritis
C. Infectious arthritis
D. Enteropathic arthritis associated with inflammatory bowel disease
E. Gout arthritis

133. Increased purine metabolism occurs in:
A. Leukemia
B. Polycythemia vera
C. Glucosamine-6-phosphatase deficiency
D. Carcinomas
E. Primary hyperparathyroidism

134. Which of the following agents inhibits xanthine oxidase:

A. Pegloticase
B. Benzbromarone
C. Allopurinol
D. Febuxostat
E. Losartan

135. The clinical and biological manifestations of ankylosing spondylitis may include:
A. HLA B27 present in over 95% of patients
B. Low back pain not relieved by rest
C. Rheumatoid nodules
D. Anterior uveitis
E. Limitation of sagittal spinal mobility

136. Ankylosing spondylitis includes the following changes:
A. Metacarpophalangeal joint swelling
B. Pain in the buttocks and/or lower back pain accompanied by a more pronounced pain in the morning, which improves after exercise
C. Entesitis
D. Xanthelasma
E. Limiting chest expansion when drawing breath

137. The etiopathogenesis of ankylosing spondylitis is thought to involve:
A. Genetic factors
B. Rheumatoid factor
C. Lupus cells
D. HLA-B27
E. The gut microbiome

138. The following criteria are suggestive for the diagnosis of ankylosing spondylitis:
A. Debut age >65
B. Insidious onset
C. Improving symptoms with exercise
D. No improvement at rest
E. Improvement after prolonged rest

139. The following extra-spinal manifestations that may be present in ankylosing spondylitis:
A. Raynaud's syndrome
B. Anterior chest pain caused by inflammation of the costochondral junction
C. Cardiac disorders
D. Aortic insufficiency
E. Interstitial lung disease

140. In advanced ankylosing spondylitis, the following radiographic changes may be present:
    A. Sacroiliac joint fusion
    B. Generalized osteophytes
    C. Spinal apophysis joint fusion
    D. Calcification of interspinous ligaments
    E. Generalized syndesmophytes

141. In ankylosing spondylitis, peripheral joint damage has the following characteristics:
    A. It is asymmetric
    B. It is oligo-articular, predominantly affecting the large joints
    C. Symmetrical polyarthritis of the small joints of the hand
    D. Hip damage leads to fixed flexion deformities of the hips and further deterioration of posture
    E. In adolescents monoarthritis may be the onset ankylosing spondylitis

142. *To achieve remission in severe forms of SLE with neurologic or renal involvement the following are used:
    A. NSAID
    B. Cyclophosphamide
    C. Corticosteroids
    D. Immunomodulators
    E. α-adrenergic inhibitors

143. *The statement about LES is true:
    A. It is more common in women
    B. It's more common in men
    C. Maximum starting age is 60-70
    D. Prevalence does not vary between ethnic groups
    E. It is more common among Caucasians

144. SLE with skin and kidney involvement is characterized by:
    A. Presence of IgM antibodies
    B. Presence of IgG antibodies
    C. Influx of neutrophils, lymphocytes
    D. Presence of complement deposits
    E. Influx of macrophages

145. Joint involvement in SLE has the following features:
    A. Presence of asymmetric arthralgias in small joints
    B. Bone erosions are common
    C. Normal clinical appearance of joints

D. Presence of symmetrical arthralgias in small joints
E. Slight swelling in periarticular soft tissues

146. In SLE, the following can be found in the skin:
A. Vasculitic lesions in the fingers
B. Butterfly rash on the forehead
C. Scarring alopecia
D. Ecchymoses
E. Raynaud's phenomenon

147. The autoantibodies found in SLE are:
A. ANCA antibodies
B. ANA antibodies
C. Anti topoisomerase-1 antibodies
D. Anti-dsDNA antibodies
E. Anti-SM antibodies

ANSWERS CHAP. II - DIABETES, NUTRITION, METABOLIC DISEASES AND RHEUMATOLOGY

1	A, D, E	40	A, B, D, E	79	D	118	B, D, E
2	D, E	41	B	80	A, B	119	A, C, D, E
3	D	42	A, B	81	B	120	A, B, C, D
4	B, D, E	43	A, C, E	82	C	121	A, D, E
5	B, C	44	A, B, D	83	A, B, C	122	A, C, D
6	A, B, E	45	B, C	84	A	123	D
7	A, B, D	46	A, B, C, D	85	C	124	A
8	A, E	47	A, B, E	86	A, B, D	125	D
9	B	48	A, D	87	A, D, E	126	B
10	B, D, E	49	C	88	B, C, E	127	C
11	A, C, E	50	E	89	A, C, D, E	128	A, B, C
12	B	51	B	90	A, C, D, E	129	B, C, E
13	A	52	A	91	A, C	130	A, C, D, E
14	A, B	53	A, C, D	92	A, C, D	131	B, C, E
15	A, D, E	54	B, C, E	93	A, E	132	A, B, D
16	A, B, D	55	B, D	94	A, B	133	A, B, D
17	C	56	A, D, E	95	A, B, E	134	C, D
18	A	57	A, B, D	96	B	135	A, B, D, E
19	D	58	B, C, E	97	B	136	B, C, E
20	D	59	B, C, D, E	98	C	137	A, D, E
21	C, D, E	60	A, B, D	99	D	138	B, C, D
22	A, B, E	61	A, B, C, D	100	C	139	B, C, D, E
23	A, C, D	62	B, C, E	101	C	140	A, C, D, E
24	A, B, D, E	63	B, C	102	D	141	A, B, D, E
25	C, D, E	64	A, B, C, E	103	A, B, D	142	B
26	A, C, D	65	B	104	A, C	143	A
27	B, C	66	B, D, E	105	A, C, D, E	144	B, C, D
28	A, B, D, E	67	C, E	106	A, C, D	145	C, D, E
29	A, C, E	68	C	107	A, C, D	146	A, C, E
30	A, C, E	69	A, C, D	108	A, C, E	147	B, D, E
31	B, C	70	A, B, D	109	A, B, D		
32	A, B, C, E	71	D	110	A, C		
33	B, C, D	72	A, B, E	111	A, C, D, E		
34	A	73	A, D	112	A, C, E		
35	B	74	B, C, D	113	A, C, D, E		
36	D	75	A, C, D	114	A, E		
37	A, C, E	76	A, C, D, E	115	A, C, D		
38	A, C, D	77	B, D, E	116	B, D, E		
39	D, E	78	A, C, D, E	117	B, C, D		

CHAP. III - ENDOCRINOLOGY

1. *Which of the following conditions can cause secondary hypothyroidism?
   A. Hashimoto's thyroiditis
   B. Thyroid agenesis
   C. Postpartum thyroiditis
   D. Hypopituitarism
   E. Iodine deficiency

2. Which of the following is a cause of hypothyroidism?
   A. Radioactive iodine therapy
   B. Propafenone treatment
   C. Iodine deficiency
   D. Postpartum thyroiditis
   E. Graves' disease

3. The following statements regarding atrophic hypothyroidism are true:
   A. Anti-thyroid antibodies are absent.
   B. It is associated with other autoimmune diseases.
   C. It causes lymphoid infiltration of the gland, atrophy and fibrosis.
   D. It is a rare cause of hypothyroidism.
   E. It is more common in men.

4. Select the correct statements regarding Hashimoto's thyroiditis:
   A. It is more common in women.
   B. Anti-TPO antibodies are absent.
   C. Levothyroxine therapy can reduce the goiter.
   D. Anti-TPO antibodies are present.
   E. Goiter is absent.

5. Which of the following signs and symptoms are part of the clinical picture of a patient with hypothyroidism?
   A. Bradycardia
   B. Proximal myopathy
   C. Heat intolerance
   D. Constipation
   E. Weight gain

6. About the screening of congenital hypothyroidism, it can be stated:

A. Use of saliva droplet to detect TSH level
B. It is performed routinely in newborns
C. It is performed to detect low TSH levels
D. Performed to detect elevated TSH levels
E. Levothyroxine therapy is indicated after the first two years of life following the detection of abnormal TSH values.

7. In myxedematous coma, additional therapeutic measures include:
   A. Intravenous iodine
   B. Gradual rewarming
   C. Hydrocortisone 100 mg iv every 8 hours
   D. Oral glucose administration
   E. Gluconic calcium iv

8. *As treatment, in primary hypothyroidism:
   A. Levothyroxine (T4, thyroxine) is given until euthyroidism is reached, then it is discontinued.
   B. Levothyroxine (T4, thyroxine) is given for life.
   C. Starting dose is 50 µg in young and fit patients.
   D. The starting dose is 100 µg in elderly patients/patients with cardiac pathology/frail patients.
   E. The dose can be increased rapidly as the treatment does not carry the risk of developing thyrotoxic ’symptoms’.

9. Causes of hyperthyroidism include:
   A. Amiodarone treatment
   B. Exogenous iodine
   C. Toxic multinodular goiter
   D. Dyshormonogenesis
   E. Hashimoto’s thyroiditis

10. Graves’s disease:
    A. It is a rare cause of hyperthyroidism
    B. It has a viral etiology
    C. It presents as a specific sign, ocular thyroid involvement
    D. Anti-TPO antibodies are pathognomonic of this disease
    E. Some Gram-negative bacteria contain TSH-binding sites and can trigger the pathology by “molecular mimicry”.

11. *Indicate the FALSE statement regarding amiodarone-induced thyrotoxicosis:

A. In type I, hyperthyroidism is triggered by the high iodine content of the drug
B. In type II, hyperthyroidism is the result of the direct destructive effect of the drug
C. In type II, hypothyroidism may set in after a few months
D. Type I is not associated with pre-existing Graves' disease
E. A higher than usual T4:T3 ratio can be observed in both types

12. The clinical picture of hyperthyroidism includes the following:
A. Sinus bradycardia, very rarely seen in the elderly
B. Children tend to gain weight
C. Children often present with a slow growth rate
D. Eyelid retraction and staring are found in hyperthyroidism of any cause
E. Apathetic thyrotoxicosis in some elderly patients

13. The following statements about hyperthyroidism are true:
A. Treatment is most often instituted without biochemical confirmation
B. Serum TSH is suppressed (<0.05 mU/L)
C. fT4 or fT3 is low
D. Anti-TSH receptor antibodies (TRAb) are specific for Graves' disease
E. Anxiety is not a differential diagnosis

14. The following statements about the treatment of hyperthyroidism are true:
A. It can be achieved by antithyroid medication, radioactive iodine, or surgery
B. After the institution of antithyroid medication, clinical benefits are evident immediately, from the first day treatment.
C. Beta-blockers are used for rapid partial symptomatic control
D. Propylthiouracil additionally blocks the conversion of T4 to T3
E. Patients with large nodular or multinodular goiters will generally require radical treatment.

15. *The major adverse effect of synthetic antithyroid drug therapy in hyperthyroidism is:
A. Goiter
B. Cardiothyreosis (thyrotoxic heart disease)
C. Agranulocytosis
D. Worsening of ophthalmopathy
E. Osteoporosis

16. Regarding the treatment of hyperthyroidism with radioactive iodine (RAI), it is true that:
A. Euthyroid state usually sets in after 2-3 months
B. It can worsen thyroid ophthalmopathy
C. It presents an increased neoplastic risk

D. All patients require a second dose of radioactive iodine, due to the persistence of thyrotoxicosis
E. It can be administered during breastfeeding.

17. About thyroid crisis (“thyroid storm”), it can be stated that:
A. Treatment is an emergency
B. It represents a rapid worsening of hypothyroidism
C. It manifests itself by hyperpyrexia, severe tachycardia, extreme agitation, heart failure and liver dysfunction.
D. It cannot occur with radioactive iodine treatment.
E. It can lead to thyrotoxic cardiomyopathy with ischemic ECG changes, occasionally.

18. The following statements about the treatment of hyperthyroidism in pregnancy are true:
A. Radioactive iodine can be used in the second and third trimesters of pregnancy
B. Propylthiouracil (PTU) is preferred in the first trimester of pregnancy
C. Carbimazole is recommended in the first trimester of pregnancy
D. Block and replacement therapy is contraindicated
E. Thyroidectomy can be performed, if necessary, preferably in the second trimester of pregnancy

19. *In the case of a pregnant woman with Graves’ disease during pregnancy, which of the following markers is directly used for the prediction of neonatal thyrotoxicosis?
A. TSH
B. fT4
C. ATPO (anti-TPO antibodies)
D. TRAb (anti-TSH receptor antibodies)
E. fT3

20. Medullary thyroid carcinoma is characterized by the following:
A. It is a neuroendocrine tumor of the calcitonin-producing C cells of the thyroid
B. It is often associated with MEN1 syndrome
C. The usual method of therapy consists of total thyroidectomy with wide lymph node dissection
D. The tumor responds very well to treatment
E. Recently, biological treatment with vandetanib and cabozantinib has shown benefits in advanced medullary carcinomas

21. In papillary and follicular carcinomas:
A. The treatment of choice is surgery: total or quasi-total thyroidectomy for localized disease.

B. Radioactive iodine ablation of postoperative residual thyroid tissue is recommended for most people with differentiated thyroid cancer
C. Less than 50% of tumors will take up iodine
D. To minimize the risk of recurrence, patients are treated postoperatively with replacement doses of levothyroxine
E. The patient's progress is monitored clinically and biochemically using serum thyroglobulin as a tumor marker.

22. *Which of the following statements regarding thyroid carcinoma is true?
A. Medullary carcinoma is derived from thyroid follicular cells.
B. The medullary type is the most common of the differentiated carcinomas.
C. Postoperative thyroglobulin measurement is most sensitive when TSH is suppressed.
D. In differentiated thyroid cancers, locally advanced and metastatic, resistant to radioactive iodine, orally administered sorafenib is the most effective.
E. Treatment with Vandetanib has demonstrated benefits in advanced anaplastic carcinomas.

ANSWERS CHAP. III - ENDOCRINOLOGY

1	D
2	A, C, D
3	B, C
4	A, C, D
5	A, B, D, E
6	B, D
7	B, C
8	B
9	A, B, C
10	C, E
11	D
12	B, D, E
13	B, D
14	A, C, D, E
15	C
16	A, B
17	A, C, E
18	B, D, E
19	D
20	A, C, E
21	A, B, E
22	D

CHAP. IV - GASTROENTEROLOGY

1. The clinical presentation of gastroesophageal reflux disease (GERD) may include the following symptoms:
   A. Heartburn
   B. Dysphagia
   C. Regurgitation of food and acid into the oral cavity
   D. Retrosternal pain after consuming spicy foods or hot liquids
   E. Rhinorrhea and cough

2. Among the complications of GERD, the following may be mentioned:
   A. Hiatal hernia
   B. Achalasia
   C. Peptic stricture
   D. Barrett's esophagus
   E. Esophageal perforation
3. *Please select the correct answer regarding risk factors for GERD:
   A. Obesity, pregnancy, alcohol, smoking
   B. Pregnancy, alcohol ingestion, chocolate, calcium channel blockers
   C. Nitrates, antimuscarinics, scleroderma
   D. Pregnancy, scleroderma, heavy meals
   E. All of the above

4. *H2 receptor antagonists include the following drugs, except:
   A. Cimetidine
   B. Ranitidine
   C. Famotidine
   D. Omeprazole
   E. Nizatidine

5. *The classic characteristics of pain in reflux disease are as follows, except:
   A. Improves with antacid ingestion
   B. Worsens with hot drink ingestion
   C. Accompanied by dyspnea
   D. Worsens with alcohol ingestion
   E. Rarely radiates to the upper limbs
6. Select the paraclinical investigations useful to support the diagnosis of GERD:
   A. Chest CT scan with contrast
   B. Gastroscopy
   C. pH monitoring

D. Impedance manometry
E. Laryngoscopy

7. Select the classes of medications used in GERD:
A. Proton pump inhibitors (PPIs)
B. Calcium channel blockers
C. Alginic acid-based preparations
D. H2 receptor antagonists
E. Endoluminal gastroplication

8. Which of the following statements are true regarding proton pump inhibitors:
A. Representatives include omeprazole, esomeprazole, pantoprazole, rabeprazole, lansoprazole
B. They reduce acid secretion by up to 75%
C. Approximately 60% of patients become asymptomatic after 4 weeks
D. The administration dose is 3–4 times/day for 6 weeks
E. Long-term treatment may increase the risk of *Clostridium difficile* infection

9. Please select the correct statements about Barrett's esophagus:
A. The squamous esophageal epithelium is replaced by stratified columnar epithelium
B. The Prague endoscopic classification is used to classify esophageal lesions
C. Approximately 0.12–0.5% of patients with Barrett's esophagus will develop esophageal adenocarcinoma annually
D. If low-grade dysplasia persists on re-biopsy, radiofrequency ablation may be recommended
E. In cases of high-grade dysplasia without visible endoscopic lesions, re-biopsy is recommended within 3 months

10. Select the correct statements about peptic strictures:
A. They represent a complication of GERD
B. They usually appear after the age of 30
C. Manifest as continuous dysphagia
D. Severe cases require endoscopic dilation
E. Mild cases respond to PPI treatment

11. The following methods should be used to diagnose Barrett's esophagus:
A. Impedance and pH monitoring
B. Chest computed tomography
C. Upper digestive endoscopy
D. Histopathological examination
E. Bravo capsule

12. Reflux esophagitis grade D according to the Los Angeles classification presents the following endoscopic changes:
A. Mucosal discontinuities (erosions) limited to folds not exceeding 5 mm
B. At least one mucosal erosion longer than 5 mm, limited to the folds, without continuity between the tips of two folds
C. Confluent mucosal erosions
D. Mucosal erosions involving more than 75% of the esophageal circumference
E. Mucosal erosions extending between the tips of folds but not circumferential

13. Select the correct statements regarding the progression from Barrett's esophagus to esophageal adenocarcinoma:
A. Intestinal metaplasia: from squamous epithelium to columnar epithelium
B. Low-grade dysplasia followed by high-grade dysplasia
C. High-grade dysplasia followed by in situ adenocarcinoma
D. Intestinal metaplasia followed by in situ adenocarcinoma
E. High-grade dysplasia followed by intestinal metaplasia

14. In a case of Barrett's esophagus with high-grade dysplasia:
A. If a lesion is visible, it can be resected endoscopically
B. If high-grade dysplasia is detected without a visible lesion on endoscopy, repeat biopsies are recommended within 3 months
C. If the lesion is endoscopically visible, medical treatment with double-dose PPI is recommended
D. Endoscopic ultrasound may be used to better stage these lesions
E. If the lesion is nodular, surgical intervention such as Nissen fundoplication is recommended

15. Select the correct statements regarding treatment of GERD:
A. H2 receptor antagonists may be used in combination with PPIs in patients with more severe disease
B. Dopaminergic antagonists are useful because they reduce peristalsis
C. Patients with severe forms of the disease may be treated with double-dose PPIs
D. Alginic acid-based preparations are first-line medications in GERD
E. Laparoscopic Nissen fundoplication has a success rate above 90%

16. The following statements about *Helicobacter pylori* infection are true:
A. The prevalence of infection is high in developed countries
B. The cytotoxic effect is due to the bacterium's urease production
C. Antral gastritis is a common consequence of *H. pylori* infection

D. 50–60% of those infected with *H. pylori* develop duodenal ulcers
E. Ulcers are more frequent when the infecting strain expresses CagA and VacA genes

17. Endoscopic evaluation of a patient suspected of peptic ulcer disease with a positive *H. pylori* test is necessary in the following cases:
A. Palpable mass detected in the epigastric region
B. Involuntary weight loss
C. Typical symptoms of peptic ulcer disease in patients under 55 years old
D. Presence of persistent vomiting
E. In all patients prior to starting eradication therapy for *H. pylori* infection

18. * The following statements about *H. pylori* infection are true, except:
A. It is a gram-negative bacterium
B. It colonizes the mucus layer of the gastric antrum
C. It specifically adheres to gastric epithelial cells
D. It may also be found in the jejunum in areas of gastric metaplasia
E. It is usually acquired during childhood

19. Consequences of *H. pylori* infection may include:
A. Antral gastritis
B. Gastric cancer
C. Duodenal ulcer
D. Halitosis
E. Duodenal cancer

20. Factors involved in the development of duodenal ulcer include:
A. Smoking
B. Increased gastrin secretion
C. Obesity
D. Spicy food
E. Chronic *H. pylori* infection

21. *The following are methods for detecting *Helicobacter pylori* infection, except:
A. Urea breath test with 13C-labeled urea
B. Fecal antibody testing
C. Rapid urease test on biopsy samples
D. Histopathological examination of biopsies
E. Serological tests detecting IgG antibodies

22. What are the “alarm symptoms” that require mandatory endoscopic evaluation:
    A. Age over 50 years
    B. Iron deficiency anemia
    C. Unintentional weight loss
    D. Hematemesis
    E. Persistent vomiting

23. Complications of peptic ulcer disease include:
    A. Gastric emptying insufficiency
    B. Perforation
    C. Intestinal obstruction
    D. Gastrointestinal bleeding
    E. Curling’s ulcer

24. *The following statements regarding Helicobacter pylori eradication regimens are true, except:
    A. Microbial resistance to metronidazole and clarithromycin is increasing
    B. Rescue therapies include cephalosporin-class antibiotics
    C. Metronidazole frequently causes side effects
    D. Compliance with treatment is essential
    E. Bismuth subcitrate is poorly tolerated by patients

25. Clinical presentation of peptic ulcer disease – select the correct statements:
    A. Pain is colicky, predominantly nocturnal
    B. Food intake always alleviates ulcer symptoms
    C. Persistent pain suggests a complication
    D. In the case of a perforated ulcer, the pain may radiate to the left hypochondrium and flank
    E. Gastric and duodenal ulcers can be asymptomatic

26. Which of the following statements are true regarding non-steroidal anti-inflammatory drugs (NSAIDs):
    A. NSAIDs inhibit prostaglandin secretion locally and systemically
    B. COX-2 selective inhibitors cause more severe gastric mucosal lesions than conventional NSAIDs
    C. About 50% of NSAID users will develop gastric mucosal lesions
    D. About 10% of users will show symptoms
    E. NSAIDs and Helicobacter pylori are synergistic risk factors

27. In patients with peptic ulcer disease requiring NSAID treatment, the following statements are true:
    A. Presence of H. pylori infection should be evaluated, and if present, eradication therapy should be initiated

B. COX-1 selective NSAIDs are preferred
C. Cytoprotective therapy may be added
D. Cytoprotective therapy (Misoprostol) is better tolerated than PPI therapy
E. PPI administration should be associated

28. Select the correct statements regarding Helicobacter pylori (HP) eradication therapy:
A. In areas with high clarithromycin resistance, therapy includes: Bismuth subcitrate, Tetracycline, Metronidazole, PPI for 7 days
B. Includes Esomeprazole, Clarithromycin, Amoxicillin, twice daily, for 14 days
C. Sequential therapy is also used in areas with high clarithromycin resistance
D. Treatment over a period of 2 weeks decreases therapeutic success rate
E. Fecal antigen testing is recommended 2 weeks after completing HP eradication therapy

29. Select the correct statements regarding gastric emptying insufficiency secondary to peptic ulcer disease:
A. It has a high incidence
B. Vomiting in gastric emptying insufficiency is projectile and usually painless
C. Diagnosis is established by scintigraphy
D. Psychogenic vomiting is common and in large quantities
E. The stenosis may be pre-pyloric, pyloric, or duodenal

30. Select the correct statements regarding surgical treatment in peptic ulcer disease:
A. Gastrectomy or vagotomy are no longer the procedures of choice in peptic ulcer disease
B. Recurrent ulcer excludes malignancy at this level
C. Vitamin B12 deficiency is commonly found in patients with gastrectomy
D. Diarrhea is predominantly a complication of vagotomy
E. Dumping syndrome is a complication occurring in patients with partial gastrectomy and gastrojejunostomy

31. The following statements are true regarding the pathogenesis of inflammatory bowel disease (IBD):
A. It involves the interaction between environmental factors, gut microbiota, genetic susceptibility, and immune response
B. Smoking increases the risk of developing Crohn’s disease
C. NSAID use is associated with remission periods in patients previously diagnosed with IBD
D. A positive family history of IBD is an independent risk factor for developing IBD
E. Lower hygiene and more crowded living environments are associated with a lower risk of developing Crohn’s disease

32. The mechanisms by which gut microbiota are linked to the etiology of IBD include:
A. Impairment of intestinal mucosal barrier function
B. Specific pathogenic organisms
C. Bacterial antigens
D. Intestinal dysbiosis
E. Microscopic lymphocytic colitis

33. The following statements regarding the changes occurring in IBD are true:
A. Ulcerative colitis (UC) may affect the rectum and extend to the sigmoid, descending, transverse, ascending colon, cecum, and terminal ileum, with discontinuous lesions
B. Crohn's disease (CD) may affect any segment of the gastrointestinal tract from the oral cavity to the anus
C. The presence of fistulas and intra-abdominal abscesses is more frequently associated with CD
D. In CD, inflammation extends through all layers of the intestine (transmural), while in UC, inflammation is limited to the mucosa
E. Granulomas and anti-neutrophil cytoplasmic antibodies (ANCA) are specific for UC

34. Extraintestinal manifestations of IBD include:
A. Atopic dermatitis
B. Sclerosing cholangitis
C. Erythema nodosum
D. Peripheral arthritis
E. Glaucoma

35. The following statements are true about the clinical presentation of Crohn's disease (CD):
A. Major symptoms include diarrhea, nausea, vomiting, abdominal pain, and fever
B. Approximately 30% of patients will require intestinal resection within 5 years of diagnosis
C. CD may present as an emergency with acute abdominal pain and rectal bleeding
D. CD can be complicated by perianal abscesses and fistulas
E. Abdominal pain in CD can be colicky, suggesting possible stenosis

36. Useful investigations in the evaluation of Crohn's disease (CD) include:
A. Upper and lower gastrointestinal endoscopy
B. Blood tests that may reveal anemia, elevated C-reactive protein, leukocytosis, hypoalbuminemia
C. Fecal calprotectin
D. Serological tests which may show positive perinuclear ANCA and negative ASCA antibodies
E. Ultrasound, MRI, capsule endoscopy, endoscopic ultrasound

37. The following statements are true regarding gastrointestinal endoscopy in Crohn's disease (CD):
A. Upper GI endoscopy is recommended for all CD patients
B. Endoscopic evaluation of the terminal ileum is essential in all patients with suspected CD
C. Capsule endoscopy is contraindicated in the presence of small bowel strictures
D. Colonoscopy may reveal changes ranging from mild, uneven, aphthous ulcers to widespread, deep ulcers with cobblestone appearance
E. Endoscopic biopsy is not always necessary

38. The following statements are true regarding treatment in Crohn's disease (CD):
A. Remission induction may be achieved with glucocorticoids, aminosalicylates, thiopurines
B. The goal of treatment is to induce and maintain clinical remission and achieve mucosal healing
C. Anti-TNF agents used in CD include infliximab, vedolizumab, ustekinumab
D. Maintenance therapies include azathioprine, mercaptopurine, or methotrexate
E. Antibiotics are used only for treating complications

39. Indications for surgical treatment in Crohn's disease (CD) include:
A. Growth retardation in children despite medical treatment
B. Failure of treatment with aminosalicylates
C. Complications of CD (intestinal obstruction, perforation, enterocutaneous fistula)
D. Sclerosing cholangitis
E. Failure of treatment with thiopurines

40. Treatment for remission induction in Crohn's disease may include:
A. Azathioprine
B. Methotrexate
C. Antibiotic therapy: ciprofloxacin or metronidazole
D. Oral or intravenous glucocorticoids
E. Anti-TNF antibodies

41. The clinical presentation of ulcerative colitis may include:
A. Bloody and mucous diarrhea, sometimes accompanied by lower abdominal discomfort
B. Anorexia with weight loss
C. In an acute attack, diarrhea occurs only during the day
D. Diarrhea is urgent and may be accompanied by incontinence
E. The main symptom in ulcerative colitis is constipation

42. The following statements about toxic megacolon are true:
A. Differential diagnosis includes infectious colitis (e.g., *C. difficile* and cytomegalovirus)
B. It is a major complication associated with severe, acute forms of UC

C. Plain abdominal X-ray reveals a dilated colon with a diameter greater than 6 cm containing gas
D. Conservative treatment is the first-line option
E. Emergency surgery is required in all patients, including those whose toxic dilation resolves after 48 hours

43. Physical examination in ulcerative colitis may reveal:
A. A distended or tender abdomen
B. Digital rectal examination may reveal the presence of blood
C. The rectum is often spared
D. Very rarely is the rectum spared
E. The anus frequently presents changes

44. The following statements about investigations in ulcerative colitis are true:
A. Blood tests may show leukocytosis, thrombocytosis, and iron deficiency anemia
B. pANCA is always negative
C. Lower GI endoscopy with mucosal biopsy is the gold standard in UC
D. Colonoscopy does not allow assessment of disease extent
E. In chronic colitis patients, chromoendoscopy is used to exclude dysplasia

45. The following statements about treatment in ulcerative colitis are true:
A. The mainstay of treatment in mild and moderate forms with any extent is a topically acting aminosalicylate in the colonic lumen
B. The mechanism of action of 5-ASA in IBD is unknown
C. In proctitis, 5-ASA suppositories are first-line treatment
D. The main treatment for mild and moderate forms is oral corticosteroid therapy
E. The main treatment for mild and moderate forms is non-steroidal anti-inflammatory drugs

46. The definition of a severe episode of ulcerative colitis includes the following:
A. More than 4 stools per day
B. Temperature over 37.5°C
C. Bradycardia
D. Anemia (hemoglobin less than 10 g/L)
E. Hypoalbuminemia

47. The following statements regarding salvage therapy in ulcerative colitis are true:
A. Continuing monotherapy with corticosteroids is recommended as it reduces mortality
B. Proven-effective salvage therapies include cyclosporine and infliximab
C. Corticosteroid therapy should be continued even after initiating salvage therapy
D. Salvage therapy is indicated for patients with CRP less than 45 mg/L and fewer than 8 stools per day

E. Salvage therapy should be initiated only by experienced gastroenterologists within a multidisciplinary team

48. The following statements about severe episodes of ulcerative colitis are true:
A. Hospitalization is recommended
B. An intestinal infection should be ruled out
C. Prophylactic anticoagulation is not recommended
D. Hydrocortisone 100 mg four times a day is recommended
E. Daily monitoring is necessary

49. The following statements about cancer in IBD are true:
A. Patients with Crohn's disease or ulcerative colitis have an increased incidence of dysplasia and colon cancer
B. Patients with IBD do not need to follow a special screening program
C. Dysplasia risk is not related to disease extent
D. Dysplasia risk is not related to disease duration
E. The presence of primary sclerosing cholangitis increases the risk of colon cancer in IBD patients

50. The following are forms of microscopic inflammatory colitis:
A. Microscopic UC
B. Celiac disease
C. Crohn's disease
D. Microscopic lymphocytic colitis
E. Microscopic collagenous colitis

51. *Which of the following macroscopic changes is specific to ulcerative colitis?
A. The affected intestine is often thickened and narrowed
B. Presence of fistulas and intra-abdominal abscesses
C. It is not associated with reflux ileitis
D. In severe forms, the mucosa adjacent to the inflammation may appear as post-inflammatory polyps
E. An early sign is aphthous ulceration

52. *Type I arthropathy in IBD is characterized by:
A. Lasts for months to years
B. Is associated with other extraintestinal manifestations
C. Is independent of the activity of inflammatory bowel disease
D. Is usually associated with uveitis
E. Is more common in ulcerative colitis

53. *Maintenance therapies in Crohn's disease include the following, except:
A. Infliximab
B. Azathioprine
C. Prednisone
D. Methotrexate
E. Mercaptopurine

54. *The standard surgical intervention for Crohn's disease affecting the entire colon and rectum is:
A. Proctocolectomy with ileorectal anastomosis
B. Stricturoplasty
C. Subtotal colectomy with terminal ileostomy
D. Total colectomy with ileorectal anastomosis
E. Proctocolectomy with terminal ileostomy

55. *The following substance is an integrin:
A. Infliximab
B. Adalimumab
C. Vedolizumab
D. Tofacitinib
E. Golimumab

56. *In ulcerative colitis that responds to intravenous corticosteroids, after how many days should oral corticosteroids be initiated?
A. 3 days
B. 5 days
C. 7 days
D. 30 days
E. 10 days

57. *Which of the following is not an indication for surgical treatment in ulcerative colitis?
A. Failure of medical treatment
B. Toxic megacolon
C. Corticosteroid dependence / incomplete response to medical treatment
D. Colitis affecting the entire colon
E. Hemorrhage

58. * Which of the following statements about chronic HBV infection is true?
A. Phase 1 is called HBeAg-positive chronic HBV infection
B. Phase 2 is called HBeAg-negative chronic HBV infection
C. Phase 3 is called HBeAg-positive chronic HBV infection

D. Phase 5 is called HBeAg-negative chronic HBV infection
E. Chronic HBV infection progresses through five distinct phases

59. * Which of the following statements are false regarding hepatitis C virus?
A. Hepatitis C virus is a single-stranded RNA virus from the *Flaviviridae* family
B. Patients with chronic HCV infection are usually asymptomatic
C. Chronic HCV infection progresses through four distinct phases
D. Diagnosis begins with the detection of anti-HCV antibodies in serum
E. Treatment for HCV infection is currently based on directly acting antiviral agents administered orally

60. *The following statement regarding chronic hepatitis D viral infection is false:
A. The delta virus cannot replicate on its own and requires HBV for activation
B. The delta virus can replicate on its own and does not require HBV presence
C. Hepatitis D infection can develop as a co-infection or superinfection with HBV
D. Spontaneous recoveries are rare
E. 60–70% of patients will develop cirrhosis faster than in HBV mono-infection

61. *Which of the following statements regarding chronic liver diseases is false?
A. Patients with chronic HCV infection are usually asymptomatic
B. Chronic HBV infection progresses through four distinct phases
C. Spontaneous recoveries in chronic HDV hepatitis are rare
D. Treatment of patients with active chronic hepatitis D is done with pegylated interferonalpha-2a for 12 months
E. Treatment of patients with active chronic hepatitis D is done with orally administered directacting antiviral agents

62. *Which of the following statements about viral hepatitis is false?
A. Chronic HCV infection leads to slow fibrosis progression that eventually results in cirrhosis over decades
B. Prophylaxis of HBV infection is achieved through vaccination
C. Hepatitis E virus is transmitted intravenously
D. The presence of anti-HAV IgM antibodies indicates acute hepatitis A virus infection
E. The prognosis of acute viral hepatitis A is excellent, with most patients recovering completely

63. *Viral hepatitis A is characterized by:
A. Fecal-oral transmission
B. The disease is not maximally infectious just before the onset of jaundice
C. Acute viral hepatitis can become chronic

D. Anicteric infection is rare in children and does not confer lifelong immunity
E. Determining viremia is necessary for definitive diagnosis

64. Phase 1 of chronic HBV infection (HBeAg-positive) is characterized by:
A. High viral replication with HBeAg-positive status, not associated with immune-mediated liver injury
B. Causes liver damage
C. Does not cause liver damage
D. Requires treatment
E. Treatment is not necessary

65. Which of the following statements about phase 2 of chronic HBV infection (HBeAg-positive) are true?
A. It is not associated with liver damage
B. Frequently associated with liver damage, fluctuating ALT levels, and elevated HBeAg-positive infection markers
C. Also known as the immune-tolerant phase
D. Treatment in this phase is necessary and may lead to seroconversion from HBeAg-positive to HBeAg-negative
E. Also known as the immune-active phase

66. Which of the following statements about the inactive carrier phase are true?
A. Corresponds to phase 3 of HBeAg-negative chronic HBV infection
B. Characterized by low HBV DNA levels (<2,000 IU/ml), absence of HBeAg, and normal ALT values
C. Corresponds to phase 4 of HBeAg-negative chronic HBV infection
D. Characterized by high viral replication levels (HBV DNA $10^5/10^6$), HBeAg-negative status, and elevated ALT
E. Corresponds to phase 2 of HBeAg-positive chronic HBV infection

67. Treatment of chronic HBV hepatitis is done with:
A. Pegylated interferon-alpha-2a (180 µg once weekly subcutaneously)
B. Pegylated interferon-alpha-2a (180 µg once monthly subcutaneously)
C. Nucleos(t)ide analogs (Tenofovir, Entecavir)
D. Nucleos(t)ide analogs administered subcutaneously
E. Nucleos(t)ide analogs administered orally

68. What is the significance of viral markers in hepatitis B?
A. HBsAg positive indicates past exposure to hepatitis B
B. The presence of anti-HBs antibodies indicates immunity from past infection or vaccination

C. HBsAg positive indicates acute or chronic infection
D. High-titer anti-HBc IgM antibodies indicate acute hepatitis B
E. Anti-HBc IgG antibodies indicate past exposure to hepatitis B

69. Possible extrahepatic manifestations of chronic HCV infection include:
A. Progression to hepatic cirrhosis
B. Arthritis
C. Cryoglobulinemia with or without glomerulonephritis
D. Porphyria cutanea tarda
E. Essential hypertension

70. Which of the following statements are true regarding treatment of chronic hepatitis C virus infection?
A. The goal of treatment is to eliminate HCV RNA from serum to stop the progression of active liver disease
B. The goal of treatment is to eliminate HCV RNA from serum to prevent development of HCC
C. Treatment is currently based on subcutaneously administered direct-acting antiviral agents
D. Treatment is currently based on orally administered direct-acting antiviral agents
E. Current regimens using direct-acting antivirals eliminate the virus in over 95% of patients

71. Which of the following statements are true regarding chronic hepatitis C virus (HCV) infection?
A. Diagnosis is based on the detection of anti-HCV antibodies and HCV RNA in serum
B. Patients with chronic HCV infection are usually asymptomatic, sometimes with moderately elevated transaminases (usually ALT)
C. Extrahepatic manifestations may occur, including arthritis, cryoglobulinemia with or without glomerulonephritis, and porphyria cutanea tarda
D. Chronic HCV infection leads to rapid fibrosis progression, resulting in cirrhosis within a few months
E. Factors associated with rapid HCV fibrosis progression include alcohol use, HIV co-infection, obesity, diabetes, and genotype 3 infection

72. Which of the following statements are true regarding chronic HCV infection?
A. Compared to HBV infection, HCV less frequently causes liver cancer in the absence of cirrhosis
B. Compared to HBV infection, HCV more frequently causes liver cancer in the absence of cirrhosis
C. Treatment of HCV infection is currently based on orally administered direct-acting antiviral agents
D. Treatment duration with direct-acting antiviral agents varies based on fibrosis stage, from

8 to 12 weeks
E. Current therapeutic regimens using direct-acting antivirals eliminate the virus in over 95% of patients

73. Clinical manifestations in patients with chronic HCV infection include:
A. Nonspecific general malaise
B. Fatigue
C. Extrahepatic manifestations including arthritis, cryoglobulinemia with or without glomerulonephritis
D. Extrahepatic manifestations including arthritis, cryoglobulinemia with or without pyelonephritis
E. Erythema nodosum

74. Which of the following statements are true regarding hepatitis D virus (HDV) infection?
A. HDV infection may occur as co-infection or superinfection with HBV
B. Diagnosis of co-infection is confirmed by detecting anti-HDV IgM antibodies in serum along with anti-HBc IgM
C. Diagnosis of superinfection is confirmed by detecting HDV RNA or anti-HDV IgM antibodies together with anti-HBc IgG
D. Treatment of patients with active liver disease is done with pegylated interferon-alpha-2a for 12 months
E. Diagnosis of co-infection is confirmed by detecting anti-HDV IgG antibodies with anti-HBc IgG

75. The hepatitis E virus (HEV) has the following characteristics:
A. Diagnosis is supported by the presence of anti-HEV IgG or IgM antibodies
B. HEV RNA can be detected in serum or stool by PCR
C. HEV infection can become chronic in immunocompromised patients
D. Transmission occurs via blood or blood products
E. Transmission is usually enteral, through contaminated water; 30% of dogs, pigs, and rodents carry the virus

76. The hepatitis A virus (HAV) has the following characteristics:
A. Infection is mainly transmitted via the fecal-oral route through contaminated food or water
B. Incubation period is short (2–3 weeks)
C. HAV infection can become chronic in immunocompromised patients
D. Symptoms are nonspecific and include nausea and anorexia
E. Treatment is done with interferon or nucleoside analogs

77. The following statements are true regarding HBV infection prophylaxis:
A. Active immunization involves administration of recombinant vaccine produced by

inserting the HBsAg gene into yeast
B. HBV vaccination includes three injections (at 0, 1, and 6 months) in the deltoid muscle
C. HBV vaccination includes three injections (at 0, 1, and 12 months) in the deltoid muscle
D. A booster dose may be needed after approximately 10 years
E. Combined active and passive prophylaxis (vaccine and immunoglobulins) should be administered to healthcare workers after accidental needlestick injury and to all newborns of HBsAg-positive mothers

78. The hepatitis D virus (HDV) has the following characteristics:
A. It is a relatively rare chronic hepatitis; spontaneous recoveries are infrequent
B. Diagnosis is made by detecting anti-delta antibodies in a patient with chronic liver disease who is HBsAg positive
C. Diagnostic confirmation is done through PCR detection of HDV RNA
D. Treatment of HDV infection is done with nucleoside/nucleotide analogs
E. HDV infection may occur as co-infection or superinfection associated with hepatitis C virus

79. Oral antiviral therapy of choice for HBV includes the following drugs:
A. Entecavir
B. Glecaprevir
C. Tenofovir
D. Pegylated interferon-alpha-2a
E. Sofosbuvir/Ledipasvir

80. Select the correct statements regarding oral antiviral therapy for HCV infection:
A. Direct-acting antiviral agents eliminate the virus in over 95% of patients
B. These drugs target enzymes inside the virus, usually polymerase, NS5A protein, or NS3/4 protease
C. Treatment duration ranges from 8–12 weeks depending on the presence or absence of cirrhosis
D. “Rescue” therapy may include sofosbuvir/velpatasvir combined with the pan-genotypic protease inhibitor voxilaprevir
E. Oral antiviral therapy is performed with nucleotide analogs (Entecavir/Tenofovir)

81. Treatment of HCV infection may include the following antiviral agents, except:
A. Sofosbuvir/Ledipasvir
B. Glecaprevir
C. Entecavir
D. Lamivudine
E. Sofosbuvir/Velpatasvir

82. *Intrahepatic causes of portal hypertension include the following, except:
A. Primary biliary cholangitis
B. Budd-Chiari syndrome
C. Cirrhosis
D. Portal vein thrombosis
E. Congenital hepatic fibrosis

83. *Select the condition in which the serum-ascites albumin gradient is elevated (>11 g/L):
A. Pancreatitis
B. Portal hypertension
C. Tuberculous peritonitis
D. Nephrotic syndrome
E. Peritoneal carcinomatosis

84. *Select the vasoconstrictor medication that may be administered to a patient with hepatic cirrhosis and variceal bleeding:
A. Propranolol
B. Terlipressin
C. Carvedilol
D. Eplerenone
E. Rifaximin

85. *The clinical presentation of hemochromatosis includes the following manifestations, except:
A. Bronze skin pigmentation
B. Diabetes mellitus
C. Hepatomegaly
D. Troublesome fluctuating pruritus
E. Secondary hypogonadism

86. *Rifaximin is:
A. A loop diuretic
B. A semi-synthetic antibiotic with a beneficial effect in secondary prophylaxis of portosystemic encephalopathy
C. A vasoconstrictor agent used in the treatment of variceal bleeding
D. A third-generation cephalosporin
E. All of the above are incorrect

87. *Which serologic investigation is characteristic for the diagnosis of primary biliary cholangitis?
A. pANCA (anti-neutrophil cytoplasmic antibodies)
B. Antinuclear antibodies (ANA) (titer >1:80)
C. Anti-smooth muscle antibodies (anti-actin) (titer >1:80)

D. Anti-liver/kidney microsomal antibodies (anti-LKM1)
E. Antimitochondrial antibodies (AMA) – titer >1:160, M2 subtype is 98% specific

88. *The following causes of liver cirrhosis are less common, except:
A. Cystic fibrosis
B. Budd-Chiari syndrome
C. Non-alcoholic fatty liver disease (NAFLD)
D. Secondary biliary cirrhosis
E. Primary biliary cholangitis

89. *The diuretic of choice used in hepatic cirrhosis is:
A. Furosemide
B. Spironolactone
C. Eplerenone
D. Vaptans
E. None of the above is correct

90. *Select the correct statement regarding primary sclerosing cholangitis:
A. Typical biliary changes can be identified via MRCP
B. Ursodeoxycholic acid is the treatment of choice
C. It is a common cause of hepatic cirrhosis
D. Serum antimitochondrial antibodies (AMA) are found in almost all patients
E. Autoimmune manifestations such as scleroderma and thyroiditis occur frequently

91. The modified Child-Pugh classification includes the following parameters:
A. Platelet count
B. Presence and severity of ascites
C. Grade of esophageal varices
D. Serum albumin level (g/L)
E. Prothrombin time (seconds above normal)

92. Primary biliary cholangitis is biologically characterized by:
A. Elevated serum alkaline phosphatase
B. Low serum cholesterol
C. Antimitochondrial antibodies present in over 95% of patients
D. Serum IgM may be very elevated
E. Antimitochondrial antibodies are negative

93. Complications of liver cirrhosis include:
A. Ascites
B. Hepatopulmonary syndrome

C. Cryoglobulinemia
D. Portosystemic encephalopathy
E. Hepatocellular carcinoma

94. Treatment of a patient with variceal bleeding includes:
A. Emergency endoscopy with variceal band ligation or sclerotherapy
B. Blood transfusion with a target hemoglobin of 90 g/L
C. Sengstaken-Blakemore tube as the first hemostatic option
D. Vasoconstrictor therapy
E. Prophylactic antibiotic therapy

95. Precipitating factors for portosystemic encephalopathy include:
A. Constipation
B. Gastrointestinal bleeding
C. High-fat diet
D. Surgical procedures
E. Central nervous system depressant medications

96. The following statements regarding liver cirrhosis are false:
A. Autoimmune hepatitis, Wilson's disease, and primary biliary cholangitis are common causes of cirrhosis
B. Ultrasound is useful for detecting HCC
C. Endoscopy is useful only for treating acute variceal bleeding
D. Decreased serum albumin and sodium are unfavorable prognostic indicators in cirrhosis
E. Prognosis can be assessed using the Child-Pugh classification or MELD score

97. Macronodular cirrhosis presents the following characteristics:
A. Regenerative nodules have variable sizes
B. It is often caused by chronic viral hepatitis
C. Regenerative nodules usually measure <3 mm
D. It is often caused by alcohol
E. It is often caused by biliary tract diseases

98. Select the unfavorable prognostic indicators in cirrhosis from the following laboratory tests:
A. Low serum sodium <125 mmol/L
B. Low serum albumin
C. Prolonged prothrombin time >6 seconds above normal
D. Elevated serum creatinine
E. Prolonged prothrombin time >3 seconds above normal

99. Frequent causes of liver cirrhosis include:
A. Primary biliary cholangitis
B. Alcohol abuse
C. Chronic hepatitis B ± D
D. Non-alcoholic fatty liver disease
E. Chronic hepatitis C

100. The following conditions are indications for liver transplantation:
A. Acute liver failure of any cause
B. Severe acute alcoholic hepatitis
C. Patients with primary biliary cholangitis and consistently elevated serum bilirubin >100 µmol/L
D. Patients with end-stage cirrhosis (Child grade C, MELD score ≥20, UKELD score ≥49)
E. Patients with end-stage cirrhosis (Child grade A, MELD score ≥20, UKELD score ≥49)

101. The MELD score includes the following biological parameters, except:
A. INR
B. Serum creatinine
C. Serum bilirubin
D. Serum albumin
E. AST

102. Treatment of ascites in patients with liver cirrhosis includes:
A. Fluid restriction if serum sodium is <128 mmol/L
B. Paracentesis is the first-line treatment
C. Diuretics
D. Paracentesis for tense ascites or when diuretic therapy is insufficient
E. Drugs that reduce sodium retention (NSAIDs, corticosteroids)

103. The following statements regarding spontaneous bacterial peritonitis (SBP) are correct:
A. Diagnostic paracentesis should always be performed
B. The most common infecting microorganisms are *Escherichia coli*, *Klebsiella*, or enterococci
C. SBP occurs in up to 50% of patients with ascites
D. Treatment includes broad-spectrum antibiotics and infusion of human albumin solution
E. Secondary prophylaxis with norfloxacin 400 mg/day prolongs survival

104. The clinical presentation of portosystemic encephalopathy may include:
A. Fetor hepaticus
B. Flapping tremor
C. Tense ascites

D. Constructive apraxia
E. Decreased quality of intellectual functioning

105. Citrin-colored ascitic fluid may occur in the following conditions:
A. Cirrhosis
B. Chronic pancreatitis
C. Congestive heart failure
D. Obstruction of the main lymphatic duct
E. Ruptured ectopic pregnancy

106. Select the absolute contraindications for liver transplantation:
A. Lack of psychological commitment from the patient
B. Hepatic metastases (except for neuroendocrine ones)
C. Extensive splanchnic venous thrombosis
D. Age under 70 years
E. Extrahepatic malignant tumors

107. The following statements about transjugular intrahepatic portosystemic shunt (TIPS) are true:
A. Reduces hepatic sinusoidal and portal vein pressure by creating an effective shunt
B. Increases the risk of portal encephalopathy
C. Used when surgical portosystemic shunt is not feasible
D. Indicated when variceal bleeding cannot be controlled acutely or in case of rebleeding
E. Stent stenosis or thrombosis is common

108. Secondary prophylaxis of recurrent variceal bleeding may be performed with the following drugs:
A. Terlipressin
B. Somatostatin
C. Propranolol
D. Carvedilol
E. Metoprolol

109. Treatment of portosystemic encephalopathy includes:
A. Identifying and eliminating any precipitating cause
B. Administration of purgatives
C. Administration of antibiotics such as Neomycin
D. Discontinuation or reduction of diuretic therapy
E. Treating infections

110. Select the correct statements about hepatorenal syndrome:
A. Occurs in patients with advanced cirrhosis, portal hypertension, jaundice, and ascites

B. Diuretic therapy should be continued, sometimes requiring increased doses
C. Eicosanoids are implicated in its pathogenesis
D. Intravascular hypovolemia should preferably be corrected with albumin
E. Liver transplantation is the best option

111. The following conditions may be associated with primary biliary cholangitis:
A. Scleroderma
B. Keratoconjunctivitis sicca
C. Thyroiditis
D. Ulcerative colitis
E. Celiac disease

112. The following statements regarding hereditary hemochromatosis are true:
A. It represents excessive iron deposition in various organs
B. 30% of patients with cirrhosis will develop hepatocellular carcinoma
C. Genetic testing is rarely necessary for definitive diagnosis
D. Laboratory tests may show elevated serum iron, increased ferritin, and often normal liver biochemistry
E. Liver biopsy is mandatory for diagnosis

113. Wilson’s disease is characterized by the following:
A. It is an autosomal recessive disorder
B. Decreased serum ceruloplasmin is present in over 80% of patients
C. A specific sign is the Kayser-Fleischer ring
D. Serum copper and ceruloplasmin are usually elevated
E. Urinary copper is decreased

114. According to the Child-Pugh classification, 2 points are awarded for the following parameters:
A. No encephalopathy
B. Moderate/severe ascites
C. Albumin (g/L) between 28–35
D. Mild ascites
E. Mild/moderate encephalopathy

115. Investigations used to determine the etiology of cirrhosis include:
A. Determination of viral markers
B. Abdominal ultrasound
C. Measurement of serum immunoglobulins
D. Fibroscan
E. Determination of serum autoantibodies

116. Therapeutic measures in a cirrhotic patient with variceal bleeding include:
A. Diuretic treatment
B. Vasoconstrictor therapy
C. Band ligation of esophageal varices
D. Sclerotherapy of esophageal varices
E. Hemoclip application to esophageal varices

117. The pathogenesis of ascitic syndrome in liver cirrhosis includes:
A. Sodium and water retention
B. Decreased serum albumin
C. Portal hypertension
D. Hepatorenal syndrome
E. Bacterial infections

ANSWERS CHAP. IV - GASTROENTEROLOGY

1	A, C, D	40	D, E	79	A, C
2	C, D	41	A, B, D	80	A, B, C, D
3	E	42	A, B, C	81	C, D
4	D	43	A, B, D	82	D
5	C	44	A, C, E	83	B
6	B, C, D	45	A, B, C	84	B
7	A, C, D	46	B, E	85	D
8	A, C, E	47	B, E	86	B
9	B, C, D, E	48	A, B, D, E	87	E
10	A, D, E	49	A, E	88	C
11	C, D	50	A, D, E	89	B
12	C, D	51	D	90	A
13	B, C	52	B	91	B, D, E
14	A, B, D	53	C	92	A, C, D
15	A, C, E	54	E	93	A, B, D, E
16	B, C, E	55	C	94	A, D, E
17	A, B, D	56	B	95	A, B, D, E
18	D	57	D	96	A, C
19	A, B, C	58	A	97	A, B
20	A, B, E	59	C	98	A, B, C, D
21	B	60	B	99	B, C, D, E
22	B, C, D, E	61	E	100	A, B, C, D
23	A, B, D	62	C	101	D, E
24	B	63	A	102	A, C, D
25	C, E	64	A, C, E	103	A, B, D, E
26	A, C, E	65	B, D, E	104	A, B, D, E
27	A, C, E	66	A, B	105	A, B, C
28	B, C	67	A, C, E	106	A, B, E
29	B, E	68	B, C, D, E	107	A, B, D
30	A, C, D, E	69	B, C, D	108	C, D
31	A, B, D, E	70	A, B, D, E	109	A, B, D, E
32	A, B, C, D	71	A, B, C, E	110	A, C, D, E
33	B, C, D	72	A, C, D, E	111	A, B, C, E
34	B, C, D	73	A, B, C	112	A, B, D
35	D, E	74	A, B, C, D	113	A, B, C
36	A, B, C, E	75	A, B, C, E	114	C, D, E
37	A, B, C, D	76	A, B, D	115	A, C, E
38	B, D, E	77	A, B, E	116	B, C, D
39	A, C	78	A, B, C	117	A, B, C

CHAP. V - NEFROLOGY

1. *Fanconi syndrome is associated with the following:
   A. Distal convoluted tubule dysfunction
   B. Collecting duct dysfunction
   C. Pseudohypoaldosteronism
   D. Syndrome of inadequate secretion of pituitary antidiuretic hormone (SIADH)
   E. Glucosuria, phosphaturia, aminoaciduria

2. *The factor that mainly influences the regulation of the extracellular volume is:
   A. Plasma urea level - an osmotically active electrolyte
   B. Sodium concentration
   C. Potassium level – predominantly extracellular electrolyte
   D. Magnesium ions
   E. The level of organic acids

3. *The following drug may cause sodium retention, especially in patients with already impaired renal function:
   A. Estrogens
   B. Loop diuretics
   C. Amiloride
   D. Triamterene
   E. Calcium channel blockers

4. *Potassium-sparing diuretics have the following clinical use:
   A. Hyperaldosteronism (primary and secondary)
   B. Hypercalciuria
   C. Metabolic alkalosis
   D. Glaucoma
   E. Syndrome of inadequate ADH secretion

5. *Which of the following is the cause of hyponatremia with hypovolemia?
   A. Hypothyroidism
   B. Psychogenic polydipsia
   C. Syndrome of inadequate pituitary antidiuretic hormone secretion
   D. Diarrhea
   E. Liver failure

6. *It is a key element in the treatment of hyponatremia:
   A. If the patient is hypovolemic - consider a loop diuretic
   B. If the patient has SIADH - saline solution 0.9%

C. If the patient has symptomatic hyponatremia, 3% saline is recommended
D. The correction must exceed 8 mmol in the first 24 h
E. Slow correction of hyponatremia causes osmotic demyelination

7. *The following statement is correct regarding hypernatremia:
A. In severe hypernatremia, 0.9% saline is not initially used
B. May occur in the context of nephrogenic diabetes insipidus
C. May occur in Addison's disease
D. May occur in hypothyroidism
E. It will be associated with reduced plasma osmolality

8. *The most common cause of chronic hypokalemia is:
A. Treatment with diuretics (especially thiazides)
B. Gordon's syndrome
C. Hyporeninemic hypoaldosteronism
D. Acute renal injury
E. Rhabdomyolysis

9. *It causes hyperkalemia by increasing the release of K from the cells:
A. Administration of amiloride
B. Cyclosporine treatment
C. Gordon syndrome
D. Tumor lysis
E. Aldosterone deficiency

10. *The strongest predictor of mortality in patients with symptomatic hyponatremia is:
A. Associated hypokalemia
B. Associated SIADH
C. Associated hypoxia
D. Associated acidosis
E. Associated acute kidney injury

11. *The entry of potassium into the cell from the extracellular environment is stimulated by:
A. Acidosis
B. Cellular damage
C. Insulin
D. Alpha-adrenergic stimulation
E. Rhabdomyolysis

12. *The treatment of hyperkalemia involves the following measures:
A. Treatment of alkalosis with hypertonic sodium bicarbonate 8.4%

B. Administration of desmopressin
C. Emergency corticosteroid therapy
D. Spironolactone/eplerenone
E. Administration of insulin and glucose

13. The following statements are true about total body water:
A. Represents 50-60% in women
B. Intracellular fluid represents 35% of lean mass
C. Interstitial fluid represents 12%
D. Plasma represents 4-5%
E. Cerebrospinal fluid represents 12%

14. Intracellular fluid:
A. Contains mainly K
B. Contains mainly Na
C. Magnesium ions are osmotically active
D. Magnesium ions are osmotically inactive
E. Calcium ions are the main intracellular osmotic factors

15. The electrolyte composition of plasma includes :
A. Na=142 mmol/l
B. K=2mmol/l
C. Ca^{2+}=2.5mmol/l
D. $HCO3^{-}$=26mmol/l
E. Proteins=16mmol/l

16. The electrolyte composition of the interstitial fluid includes:
A. Na=144 mmol/l
B. K=4 mmol/l
C. Ca^{2+}=2.5 mmol/l
D. $HCO3^{-}$=30 mmol/l
E. Proteins=55 mmol/l

17. The electrolyte composition of intracellular fluid is :
A. Na=10 mmol/l
B. K=160 mmol/l
C. Ca^{2+}=1.5 mmol/l
D. $HCO3^{-}$=26 mmol/l
E. Proteins=55 mmol/l

18. Extrarenal volume receptors are at the level of :

A. Right atrium
B. Major thoracic veins
C. Carotid sinus body
D. Aortic arch
E. Afferent glomerular arterioles

19. A salt load will result in :
A. Increase in effective circulating volume
B. Decreased extracellular volume
C. Increases renal perfusion pressure
D. Decreases renin secretion
E. Increases aldosterone secretion

20. A low salt intake will lead to :
A. Increase in effective circulating volume
B. Decreased extracellular volume
C. Increases renal perfusion pressure
D. Decreases renin secretion
E. Increases aldosterone secretion

21. Edema occurs in the following conditions:
A. Heart failure
B. Hypertension
C. Liver cirrhosis
D. Hypoalbuminemia
E. Acute dehydration syndrome

22. The major functions of the proximal convoluted tubule are :
A. Solute reabsorption
B. Urate secretion/absorption
C. Drug secretion
D. Potassium secretion
E. Renin secretion

23. Diseases associated with pathology of the proximal convoluted tube :
A. Fanconi syndrome
B. Barter syndrome
C. Gitelman syndrome
D. Renal tubular acidosis type 2
E. Renal tubular acidosis type 1

24. At the level of the collecting duct, the following processes occur :
    A. Sodium secretion
    B. Sodium absorption
    C. Water secretion
    D. Water absorption
    E. Potassium secretion

25. Diseases associated with collecting duct pathology:
    A. Fanconi syndrome
    B. Barter syndrome
    C. Liddle syndrome
    D. Pseudohypoaldosteronism type 1
    E. Nephrogenic diabetes insipidus

26. According to Starling's principles, the distribution of extracellular volume depends on:
    A. Venous tone
    B. Capillary permeability
    C. Arterial blood pressure
    D. Oncotic pressure
    E. Lymphatic drainage

27. What are the adverse effects of loop diuretics?
    A. Uric acid retention
    B. Hypokalemia
    C. Hyperkalemia
    D. Decreased glucose tolerance
    E. Increased glucose tolerance

28. Which of the following drugs can cause sodium retention?
    A. Diuretics
    B. Estrogens
    C. Mineralocorticoids
    D. Nonsteroidal anti-inflammatory drugs (NSAIDs)
    E. Thiazolidinediones

29. Potassium-sparing diuretics include:
    A. Acetazolamide
    B. Lixivaptan
    C. Bumetanide
    D. Amiloride
    E. Triamterene

30. What are the causes of hyponatremia with normal extracellular volume ?
    A. Syndrome of inappropriate antidiuretic hormone secretion (SIADH)
    B. Abnormal antidiuretic hormone release
    C. Vomiting
    D. Tubulointerstitial kidney disease
    E. Psychiatric disorders

31. What are the causes of hypokalemia?
    A. Loop diuretics
    B. Conn's syndrome
    C. Gitelman syndrome
    D. Renal tubular acidosis, type 1 and type 2
    E. Acute kidney injury

32. Which of the following actions are specific to emergency management of hyperkalemia?
    A. ECG monitoring and intravenous access
    B. Administration of Patiromer
    C. Correction of severe acidosis
    D. Intravenous administration of 10 ml of 10% calcium gluconate over 5 minutes
    E. Hemodialysis or peritoneal dialysis

33. Postural hypotension may occur in the following situations:
    A. Diabetes mellitus
    B. Parkinson disease
    C. Administration of nitrates
    D. Prolonged bed rest
    E. High salt intake

34. The adverse effects of loop diuretics are:
    A. Hypokalemia
    B. Hypercalciuria
    C. Hypermagnesemia
    D. Ototoxicity
    E. Hyperkalemia

35. The following statements regarding potassium-sparing diuretics (aldosterone antagonist type) are true:
    A. They increase sodium reabsorption
    B. They are not recommended in heart failure
    C. They antagonize the fibrotic effects of aldosterone on the heart
    D. Eplerenone lacks antiandrogenic properties

E. They are represented by metolazone and indapamide

36. Euvolemic hyponatremia may occur in the following clinical situations:
    A. Hypothyroidism
    B. Antidepressant therapy
    C. Addison disease
    D. Acute hemorrhage
    E. Osmotic diuresis

37. To prevent osmotic demyelination syndrome, the following measures are recommended:
    A. Rapid correction of serum potassium
    B. Rapid correction of hyponatremia
    C. Slow increase in sodium levels
    D. Limiting the rise in plasma sodium to a maximum of 8 mmol/l per day
    E. Administration of thiazide or loop diuretics

38. The following may be causes of hypokalemia:
    A. Severe diarrhea
    B. Liddle syndrome
    C. Rhabdomyolysis
    D. Diabetic ketoacidosis
    E. Renal tubular acidosis types 1 and 2

39. The following statements regarding the treatment of hyperkalemia are true:
    A. Calcium ions protect against the effects of hyperkalemia but do not alter potassium concentration
    B. Patiromer binds potassium in the gastrointestinal tract
    C. Correction of concurrent metabolic alkalosis with 1.26% sodium bicarbonate is required
    D. Intravenous insulin plus glucose is administered
    E. Hemodialysis may be required

40. Causes of hyponatremia with hypovolemia and urinary sodium below 20 mmol/l include:
    A. Vomiting
    B. Diuretics
    C. Tubulointerstitial kidney disease
    D. Hemorrhage
    E. Diarrhea

41. Causes of hypernatremia may include:
    A. Antidiuretic hormone (ADH) deficiency

B. Inadequate water intake
C. Psychogenic polydipsia
D. Addison disease
E. Hypothyroidism

42. The following investigations are altered in hypernatremia:
A. Plasma osmolality is decreased
B. Urine osmolality lower than plasma osmolality indicates diabetes insipidus
C. Urine osmolality increases after desmopressin administration in central (pituitary) diabetes insipidus
D. Urine osmolality is low in osmotic diuresis
E. Urine osmolality is elevated in heat stroke

43. Liddle syndrome is characterized by the following features:
A. Hypokalemia and acidosis
B. Hypokalemia and alkalosis
C. Decreased renin production
D. Arterial hypertension
E. Decreased aldosterone production

44. Clinically, hypokalemia may be associated with:
A. Increased frequency of atrial and ventricular extrasystoles
B. Muscle weakness
C. Osmotic demyelination syndrome
D. Polyuria, polydipsia, and thirst
E. Fever

45. The following are causes of hyperkalemia due to increased potassium release from cells:
A. Aldosterone deficiency
B. Gordon syndrome
C. Tumor lysis
D. Diabetic ketoacidosis
E. Rhabdomyolysis

46. The following are causes of hyponatremia with hypervolemia:
A. Central (pituitary) diabetes insipidus
B. Nephrogenic diabetes insipidus
C. Heart failure
D. Liver failure
E. Hypoalbuminemia

47. What are the clinical signs of decreased extracellular volume?
    A. Postural (orthostatic) hypotension
    B. Skin turgor
    C. Elevated jugular venous pressure
    D. Peripheral venoconstriction
    E. Arterial hypertension

48. *In the Henderson-Hasselbalch equation, the pK has a value of:
    A. 5.9
    B. 6
    C. 6.1
    D. 6.2
    E. 6.3

49. *In respiratory acidosis, the following changes occur:
    A. Increased pH
    B. Very low pCO_2
    C. Normal pCO_2
    D. Increased HCO_3^-
    E. Decreased HCO_3^-

50. *The following feature is characteristic of type 4 renal tubular acidosis:
    A. Hypokalemia
    B. Low plasma chloride and elevated bicarbonate levels
    C. Low 24-hour basal aldosterone level
    D. Abnormal adrenocorticotropic hormone (ACTH) stimulation test
    E. Correction of hyperkalemia with 0.1 ml furosemide

51. *The normal value of the anion gap is:
    A. -2 – 2 mmol/L
    B. 2-6mmol/l
    C. 5-12 mmol/l
    D. 12-16mmol/L
    E. 15-21mmol/L

52. *Carbonic acid is dissociated into carbon dioxide and water in the presence of:
    A. Carbonic anhydrase
    B. Carbonic amylase
    C. Carbonic glutaraldehyde oxidase
    D. Carbonic lipase
    E. Aldosterone

53. Principal cells of the collecting tubules :
    A. Have receptors for sodium absorption
    B. Reabsorb sodium and water, and secrete potassium
    C. Reabsorb potassium and secrete sodium and water
    D. Respond to the action of aldosterone
    E. Are resistant to the action of aldosterone

54. Causes of metabolic acidosis include :
    A. Type 2 renal tubular acidosis
    B. Increased lysine catabolism
    C. Chronic obstructive pulmonary disease
    D. Treatment with acetazolamide
    E. Type 4 renal tubular acidosis

55. Causes of distal renal tubular acidosis (type 1) include:
    A. Marfan syndrome
    B. Ehlers-Danlos syndrome
    C. Use of Amphotericin B
    D. Use of NSAIDs
    E. Henderson-Hasselbalch syndrome

56. Chronic acidosis in chronic kidney disease:
    A. Decreases the ability to excrete ammonia
    B. Increases the ability to excrete H^+
    C. May lead to renal osteodystrophy
    D. Is usually corrected by dialysis
    E. Tubular disease causes bicarbonate retention

57. Type 1 renal tubular acidosis (“distal”) is characterized by:
    A. Alkalosis
    B. Acidosis
    C. Low urinary ammonium production
    D. High urinary ammonium production
    E. Inability to lower urinary pH below 5.3 despite the presence of systemic acidosis

58. The following are causes of metabolic acidosis with an increased anion gap:
    A. Diabetic ketoacidosis
    B. Salicylate overdose
    C. Potassium depletion / Mineralocorticoid excess
    D. Hypercalcemic state

E. Ethylene glycol ingestion

59. Regarding renal bicarbonate reabsorption, the following statements can be made:
A. Plasma HCO_3^- is normally maintained at approximately 25 mmol/l
B. The distal convoluted tubule is responsible for approximately 85–90% of filtered bicarbonate reabsorption
C. Bicarbonate reabsorption is catalyzed by the Na^+/K^+-ATPase pump
D. A higher amount of intraluminal carbonic anhydrase is present in the distal tubule
E. Plasma HCO_3^- is normally maintained at approximately 45 mmol/l

60. Causes of metabolic acidosis with a normal anion gap include:
A. Distal renal tubular acidosis (type 1)
B. Renal tubular acidosis type 4
C. Increased production of hydrochloric acid (HCl)
D. Decreased catabolism of arginine and lysine
E. Ingestion of ammonium chloride

61. The cations normally present in plasma are:
A. Cl^-
B. HCO_3^-
C. Na^+
D. K^+
E. Mg^{2+}

62. Which of the following conditions promote ammonia synthesis in proximal tubular cells?
A. Hyperkalemia
B. Hypokalemia
C. Respiratory alkalosis
D. Systemic acidosis
E. Metabolic alkalosis

63. The following blood gas abnormalities are typically seen in metabolic alkalosis:
A. Decreased HCO_3^-
B. Increased HCO_3^-
C. Decreased $PaCO_2$
D. Increased $PaCO_2$
E. Normal or increased pH

64. The following blood gas abnormalities are typically seen in metabolic acidosis:
A. Decreased HCO_3^-
B. Increased HCO_3^-

C. Decreased $PaCO_2$
D. Increased $PaCO_2$
E. Normal or increased pH

65. The following blood gas abnormalities are typically seen in respiratory acidosis:
A. Decreased HCO_3^-
B. Increased HCO_3^-
C. Decreased $PaCO_2$
D. Increased $PaCO_2$
E. Normal or increased pH

66. The following blood gas abnormalities are typically seen in respiratory alkalosis:
A. Decreased HCO_3^-
B. Increased HCO_3^-
C. Decreased $PaCO_2$ -
D. Increased $PaCO_2$ -
E. Normal or increased pH

67. *The initial structural lesion in diabetic nephropathy is represented by :
A. Advanced glomerulosclerosis
B. Hyaline material deposition
C. Thickening of the glomerular basement membrane
D. Crescent
E. Nodular glomerulosclerosis (Kimmelstiel-Wilson lesion)

68. *The treatment of diabetic nephropathy consists of::
A. Initiation of immunosuppressive therapy
B. Corticosteroid therapy
C. Corticosteroid therapy + immunosuppression
D. Strict glycemic control
E. Azathioprine

69. *Most patients with idiopathic membranous nephropathy present the following type of autoantibodies:
A. Antinuclear antibodies
B. Anti-Sm antibodies
C. Anti-glomerular basement membrane (anti-GBM) antibodies
D. ANCA (anti-neutrophil cytoplasmic antibodies)
E. Anti-PLA2R antibodies

70. *The following type of rapidly progressive glomerulonephritis (RPGN) shows a negative immunofluorescence pattern:

A. ANCA-associated systemic vasculitis
B. Idiopathic immune complex–mediated RPGN
C. IgA nephropathy
D. Membranoproliferative glomerulonephritis (MPGN)
E. Goodpasture syndrome

71. *The main cells involved in nephrotic syndrome are:

A. Endothelial cells
B. Podocytes
C. Acanthocytes
D. Mesangial cells
E. Myofibroblasts

72. *Kimmelstiel-Wilson lesions are characteristic of the following class of diabetic nephropathy (according to the Renal Pathology Society Classification) :

A. III
B. IIa
C. IIb
D. I
E. Ib

73. *Nephrotic syndrome is characterized by the following, except:

A. Hypoalbuminemia
B. Edema
C. Dyslipidemia
D. Proteinuria>3,5g/zi
E. Proteinuria<3,5g/zi

74. *According to the Renal Pathology Society classification, class IIb diabetic nephropathy is characterized by :

A. Mild mesangial expansion
B. Kimmelstiel-Wilson lesion
C. Global glomerulosclerosis
D. Severe mesangial expansion
E. Isolated thickening of the GBM

75. *A crescent is defined as:

A. Mesangial deposits of polymeric IgA1
B. Thickening of the GBM

C. Amiloride deposition in the mesangium
D. Eosinophilic deposits in the mesangium
E. An aggregate of macrophages and epithelial cells in Bowman's space

76. *Regarding the types of RPGN, the negative immunofluorescence pattern (pauci-immune RPGN) includes:
A. Cryoglobulinemia
B. ANCA-associated systemic vasculitis
C. Systemic lupus erythematosus
D. Goodpasture syndrome
E. Alport syndrome

77. *PLA2R antibody positivity suggests:
A. ANCA-associated systemic vasculitis
B. Anti-GBM glomerulonephritis
C. Idiopathic membranous nephropathy
D. Diabetic nephropathy
E. HIV-associated nephropathy

78. The glomerular filtration barrier consists of:
A. Vascular epithelium
B. Glomerular basement membrane (GBM)
C. Podocytes
D. Fenestrated endothelium
E. Mesangial matrix

79. The following are among the four major glomerular syndromes most frequently described:
A. Nephrotic syndrome
B. Polyuric syndrome
C. Asymptomatic hematuria
D. Mixed nephritic/nephrotic presentations
E. Nephritic syndrome

80. The following glomerulopathies are associated with nephrotic syndrome:
A. Membranous nephropathy
B. Diabetic nephropathy
C. Acute glomerulonephritis
D. ANCA -associated vasculitis
E. Minimal change disease

81. The following statements are true regarding focal segmental glomerulosclerosis (FSGS):

A. First-line treatment in adults includes Cyclophosphamide, Chlorambucil, or Azathioprine
B. The classic histological variant of FSGS shows sclerotic segments involving the entire glomerulus
C. Primary FSGS usually presents with massive proteinuria, hematuria, hypertension, and renal failure
D. It does not recur in the transplanted kidney
E. Prednisolone 0.5–2 mg/kg/day is used as treatment in most patients

82. The following are considered causes of secondary membranous glomerulonephritis:
A. Hepatitis C
B. Cancers
C. Sarcoidosis
D. NSAIDs
E. Diabetes

83. The following statements about amyloidosis are true:
A. Imaging shows reduced kidney size
B. On Congo Red staining, eosinophilic deposits appear pink
C. Macroglossia occurs in approximately 10% of AL amyloidosis cases
D. Cardiac involvement is common in AA amyloidosis
E. Familial amyloidoses have autosomal dominant inheritance

84. Treatment of membranous glomerulopathy includes:
A. Oral corticosteroids alone
B. ACE inhibitors at the maximum tolerated dose
C. Alternating Chlorambucil (months 2, 4, 6) with oral Prednisolone (months 1, 3, 5)
D. Rituximab administration is effective in inducing remission
E. Azathioprine is used for inducing remission

85. The following types of RPGN fall under the linear immunofluorescence pattern:
A. Idiopathic immune complex-mediated RPGN
B. Goodpasture syndrome
C. ANCA-associated systemic vasculitis
D. Idiopathic anti-GBM antibody-mediated RPGN
E. Systemic lupus erythematosus

86. Acute nephritis classically presents with:
A. Proteinuria
B. Hypertension
C. Macroscopic or microscopic hematuria with red blood cell casts on urine microscopy

D. Edema
E. Leukocyturia

87. The following diseases are commonly associated with acute nephritic syndrome:
A. Systemic lupus erythematosus
B. Henoch-Schönlein purpura
C. Focal segmental glomerulosclerosis
D. Post-streptococcal glomerulonephritis
E. Diabetic nephropathy

88. The following statements about IgA nephropathy are false:
A. More common in children and young men
B. Most cases present with intense nephrotic syndrome
C. Tonsillectomy may reduce proteinuria and hematuria in patients with recurrent tonsillitis
D. Treatment includes oral corticosteroids
E. ACE inhibitors or ARBs are contraindicated

89. The clinical picture in Alport syndrome includes:
A. Hematuria
B. Proteinuria <1–2 g/day
C. Purpura
D. Sensorineural deafness
E. Progressive kidney disease

90. The following are small-vessel vasculidities affecting the kidneys:
A. Takayasu arteritis
B. Granulomatosis with polyangiitis
C. Eosinophilic granulomatosis with polyangiitis
D. Microscopic polyangiitis
E. Kawasaki disease

91. Treatment of anti-GBM glomerulonephritis includes:
A. Plasmapheresis to remove circulating anti-GBM antibodies
B. Cyclophosphamide to suppress further antibody production
C. Mycophenolate mofetil to induce remission
D. Corticosteroids to suppress inflammation caused by deposited antibodies
E. SGLT2 inhibitors

92. The following statements about ANCA-positive small vessel vasculitis are true:
A. Clinically may present with purpuric rashes or vasculitic ulcers

B. Drugs most frequently induce MPO-ANCA-associated vasculitis
C. Does not involve pulmonary hemorrhage
D. ANCA antibodies cannot coexist with anti-GBM antibodies
E. Histology is the “gold standard” for diagnosis and prognosis

93. Treatment of fulminant disease in ANCA-positive vasculitis includes:
A. Intensification of immunosuppression
B. Addition of plasmapheresis
C. Reduction of Prednisolone dose
D. Cyclophosphamide
E. Delay in treatment until histological confirmation

94. The following statements about Type 1 MPGN (Membranoproliferative Glomerulonephritis) are true:
A. Microscopy shows a “tram-track” appearance
B. It can occur secondary to chronic infections (abscess, endocarditis)
C. In idiopathic Type 1 MPGN without renal involvement and without proteinuria, no treatment is given
D. Also called dense deposit disease
E. Serum C4 levels are decreased

95. The extraglomerular renal features of lupus nephritis include:
A. Tubulointerstitial nephritis
B. Low C3 levels
C. Renal vein thrombosis
D. Renal artery stenosis
E. Hemoptysis

96. According to the lupus nephritis classification – Class IV (Diffuse LN) is characterized by:
A. >90% sclerotic glomeruli
B. Progression to nephrotic syndrome, hypertension, and renal failure
C. >50% of glomeruli with segmental and global lesions
D. A benign course
E. The most common and severe clinical form

97. The following statements regarding the treatment of lupus nephritis are considered true:
A. Class V lupus nephritis does not require specific treatment
B. Steroids and high-dose IV cyclophosphamide or MMF can be used as induction therapy
C. MMF or Azathioprine are used in maintenance therapy
D. Minimal mesangial lupus nephritis requires immunosuppressive therapy

E. Rituximab is not useful in severe refractory lupus nephritis

98. The systemic clinical features in cryoglobulinemic kidney disease include:
A. Arthralgia
B. Raynaud's phenomenon
C. Polyneuropathy
D. Alport syndrome
E. Purpura

99. The following statements about anti-GBM glomerulonephritis are true:
A. Two-thirds of patients with Goodpasture syndrome present with associated pulmonary hemorrhage
B. Anti-GBM antibodies are not present in patient serum
C. Prognosis is directly related to the extent of glomerular damage at the start of treatment
D. The typical immunofluorescence pattern in Goodpasture syndrome shows linear deposition of anti-GBM antibodies
E. Oral corticosteroids are not used in treatment

100. Renoprotection is achieved by:
A. Maintaining BP <130/80 mmHg
B. Keeping 24-hour proteinuria >1g/24h
C. Administration of statins
D. Use of anticoagulants
E. Smoking cessation

101. The characteristic clinical feautures of Henoch-Schonlein syndrome includes:
A. Abdominal colic
B. GN (Glomerulonephritis)
C. Peripheral neuropathy
D. Joint pain
E. Malar rash

102. Transient proteinuria may occur in:
A. Febrile states
B. Congestive heart failure
C. Goodpasture syndrome
D. Infectious diseases
E. Alport syndrome

103. The following diseases are included in the spectrum of monoclonal gammapathy of renal significance (MGRS):
A. AL amyloidosis

B. Lupus nephropathy
C. Cryoglobulinemic glomerulonephritis
D. Henoch Schonlein syndrome
E. Fibrillary glomerulonephritis

104. Lupus nephritis class IV is characterized by :
A. Progression to nephrotic syndrome
B. Presence of subepithelial deposits
C. Involvement of < 50% of glomeruli
D. Is the most common form of lupus nephropathy
E. It is a mild renal disease

105. The following statements regarding the treatment of lupus nephritis are true:
A. Type I lupus nephritis requires sterois treatment
B. Cyclosporine can be used in maintainance therapy for remission
C. Rituximab may be useful in severe refractory lupus nephritis
D. Cyclophosphamide is used as induction therapy in type II lupus nephritis
E. Renal biopsy and histology guide the therapy

106. Immunoglobulin A vasculitis (Henoch-Schönlein syndrome) includes:
A. Odynophagia
B. Characteristic skin rash
C. Joint pain
D. Glomerulonephritis
E. Abdominal colic

107. The following are included under the term monoclonal gammopathy of renal significance (MGRS):
A. AL amyloidosis
B. Idiopathic membranous nephropathy
C. C3 nephropathy with paraproteinemia
D. Lupus nephritis type III, IV
E. Advanced sclerosing lupus nephritis

108. Clinical suspicion of a non-diabetic cause of nephropathy may be raised by:
A. An atypical history
B. Absence of diabetic retinopathy
C. Hematuria
D. Albuminuria
E. Nephrotic-range proteinuria

109. Therapeutic renoprotective measures in diabetic nephropathy include:
A. Achieving a blood pressure target < 140/90 mmHg
B. Target proteinuria < 0.3 g/24 hours
C. Target HbA1c < 6%
D. Performing 6 sessions of plasmapheresis
E. Controlling dyslipidemia

110. The following drugs may induce MPO-ANCA-associated vasculitis:
A. Propylthiouracil
B. Minocycline
C. Unfractionated heparin
D. Hydroxychloroquine
E. Cyclophosphamide

111. *Non-steroidal anti-inflammatory drugs may sometimes cause the following type of glomerulopathy associated with tubulointerstitial nephritis:
A. Focal segmental glomerulosclerosis
B. Minimal change disease
C. Membranoproliferative glomerulonephritis
D. Rapidly progressive glomerulonephritis
E. IgA nephropathy

112. *The following systemic diseases may cause chronic tubulointerstitial nephritis:
A. Hyperoxaluria
B. Hyperuricemia
C. Hyperkalemia
D. Sarcoidosis
E. Reflux nephropathy

113. The following statements about acute tubulointerstitial nephritis (TIN) caused by infections are true:
A. TIN can complicate systemic viral infections
B. TIN cannot complicate systemic bacterial infections
C. TIN cannot complicate systemic viral infections
D. Treatment involves eradication of the infection
E. In transplant patients, the immunosuppression protocol must be adjusted

114. Metabolic causes of chronic tubulointerstitial nephritis include:
A. Sickle cell disease
B. Hypouricemia
C. Sickle cell disease

D. Nephrocalcinosis
E. Hyperoxaluria

115. The clinical feautures of analgesic nephropathy may include:
A. Hematuria
B. Urinary tract infections
C. Urinary tract obstruction
D. Ulcers
E. Erysipelas

116. The treatment of analgesic nephropathy includes:
A. Use of an alternative analgesic or antipyretic such as sodium diclofenac
B. Avoidance of NSAIDs
C. Initiation of therapy with Febuxostat
D. Slowing the progression of the disease
E. Initiation of cyclophosphamide pulses

117. *According to the KDIGO (2012) classification of chronic kidney disease, a glomerular filtration rate of 33 ml/min/1.73m² corresponds to the following stage:
A. G2
B. G3a
C. G3b
D. G4
E. G5

118. *The target hemoglobin in patients with anemia secondary to chronic kidney disease is between:
A. 80–100 g/L
B. 100–120 g/L
C. 120–140 g/L
D. >140 g/L
E. 90–100 g/L

119. *The main mechanism of anemia in chronic kidney disease is:
A. Gastrointestinal blood loss
B. Vitamin B12 deficiency
C. Folate deficiency
D. Erythropoietin deficiency
E. Hemolysis

120. *The following vascular access is used for emergency dialysis treatment:
A. Tunneled central venous catheter
B. Radiocephalic arteriovenous fistula
C. Brachiocephalic arteriovenous fistula
D. Temporary central venous catheter
E. Synthetic arteriovenous graft

121. *For correction of metabolic acidosis in chronic kidney disease, the following is administered:
A. Paricalcitol
B. Sodium bicarbonate
C. Potassium chloride
D. Erythropoietin
E. Phosphate binders

122. *A patient with chronic kidney disease, eGFR of 28 ml/min, and urine albumin/creatinine ratio of 25 mg/mmol is in stage:
A. G3aA3
B. G3bA1
C. G4A2
D. G5A1
E. G3bA1

123. *The target serum hemoglobin in CKD patients:
A. Is over 120 g/L
B. Is between 100–120 g/L
C. Is achieved only through transfusions
D. Is achieved only through erythropoiesis-stimulating agents
E. Is achieved only through iron supplementation

124. *In CKD patients, the following should be avoided:
A. Intravenous iron
B. Non-steroidal anti-inflammatory drugs (NSAIDs)
C. Calcimimetic agents
D. Intestinal phosphate binders
E. Erythropoiesis-stimulating agents

125. *The following is a late complication of kidney transplantation:
A. Acute tubular necrosis
B. Venous anastomosis occlusion
C. Acute rejection

D. Arterial anastomosis stenosis
E. Lymphoproliferative disorders

126. The following changes occur in mineral bone disorder associated with chronic kidney disease:
A. Calcium changes
B. Potassium changes
C. Phosphorus changes
D. PTH changes
E. Sodium changes

127. Calcimimetic agents used in chronic kidney disease have the following properties:
A. Are used in the treatment of hyperkalemia
B. Suppress PTH levels
C. Prevent protein-caloric malnutrition in chronic kidney disease patients
D. Help reduce the calcium-phosphorus product
E. Promote vascular calcifications

128. Pruritus in patients with chronic kidney disease is caused by:
A. Hyperkalemia
B. Erythropoietin deficiency
C. Accumulation of residual nitrogen products resulting from protein catabolism
D. Hyperparathyroidism
E. Metabolic acidosis

129. To reduce phosphorus in chronic kidney disease patients, the following treatments are given:
A. Glucose buffered with insulin
B. Thiazide diuretics
C. Intestinal phosphate binders
D. Dietary restriction
E. Intravenous sodium bicarbonate

130. The following medications should be avoided in chronic kidney disease patients, due to nephrotoxicity:
A. Third- and fourth-generation cephalosporins
B. Calcium channel blockers
C. Furosemide
D. Non-steroidal anti-inflammatory drugs (NSAIDs)
E. Gentamicin

131. According to the 2012 KDIGO classification of chronic kidney disease, patients are staged based on:
A. Estimated glomerular filtration rate (eGFR)
B. Body weight
C. Albuminuria
D. Ankle-brachial index
E. Urea excretion rate

132. The following vascular diseases are involved in the etiology of chronic kidney disease:
A. Balkan endemic nephropathy
B. Kidney stone disease
C. Hypertensive nephrosclerosis
D. Renovascular disease
E. Vasculitis of small and medium vessels

133. The treatment of mineral bone disorder associated with chronic kidney disease aims for the following biochemical changes:
A. Reduction of serum phosphorus
B. Control of PTH levels
C. Reduction of serum potassium
D. Achieving normal levels of serum calcium
E. Decrease of serum creatinine

134. The following endocrine abnormalities may be found in chronic kidney disease patients:
A. Hyperprolactinemia
B. Amenorrhea
C. Increased serum testosterone
D. Decreased spermatogenesis
E. Complex abnormalities in growth hormone secretion and action

135. The following statements about uremic pericarditis are true:
A. It occurs in the early stages (G1 and G2) of chronic kidney disease
B. It poses a risk of cardiac tamponade
C. It may be a sign of ineffective dialysis
D. It is a sign of severe uremia
E. It can resolve with intensive dialysis

136. Risk factors leading to the development of calciphylaxis in chronic kidney disease patients include:
A. Low serum phosphorus levels
B. Hyperparathyroidism

C. Use of warfarin
D. Use of calcimimetics
E. Elevated serum potassium levels

137. The following statements regarding dialysis disequilibrium syndrome are true:
A. It frequently occurs in patients undergoing peritoneal dialysis
B. It occurs when the rate of urea removal during dialysis is too rapid
C. It occurs during short hemodialysis sessions
D. It can be avoided by gradually correcting uremia via short hemodialysis sessions
E. It may cause cerebral edema

138. The following immunosuppressants are calcineurin inhibitors:
A. Prednisone
B. Azathioprine
C. Cyclosporine
D. Tacrolimus
E. Daclizumab

139. Medications used in chronic kidney disease to lower serum PTH levels include:
A. Alfacalcidol
B. Paricalcitol
C. Prednisone
D. Cinacalcet
E. Calcium channel blockers

140. The following glomerular diseases can lead to chronic kidney disease:
A. Polycystic kidney disease
B. Amyloidosis
C. Reflux nephropathy
D. Focal segmental glomerulosclerosis
E. Nephrocalcinosis

141. Vascular access complications in chronically hemodialyzed patients include:
A. Central venous catheter malfunction
B. Arteriovenous fistula thrombosis
C. Spontaneous bacterial peritonitis
D. Bleeding at the vascular access site
E. Osteolysis

142. Peritoneal dialysis can lead to the following complications:
A. Sclerosing peritonitis

B. Bacterial peritonitis
C. Exit-site infection
D. Subcutaneous tunnel infection (tunnelitis)
E. Arteriovenous fistula thrombosis

143. Calcineurin inhibitors used in renal transplant patients may lead to the following side effects:
A. Nephrotoxicity
B. Severe B-cell depletion
C. Arterial hypertension
D. Primary hyperparathyroidism
E. Renal amyloidosis

144. Acute rejection in kidney transplant patients is characterized by:
A. Renal function deterioration within the first 3 months
B. Most commonly seen in patients with polycystic kidney disease
C. Renal biopsy is useful to confirm the diagnosis and to assess severity and type of rejection
D. Cellular rejection may respond to high-dose intravenous corticosteroids
E. Usually occurs after 10 years of disease progression

145. Early complications that may occur in kidney transplant recipients include:
A. Malignant tumors due to immunosuppressive treatment
B. Acute rejection
C. Arterial anastomosis occlusion or stenosis
D. Venous anastomosis occlusion
E. Osteoporosis

146. The following statements about metabolic abnormalities in chronic kidney disease are true:
A. Uric acid is retained as glomerular filtration rate declines
B. Insulin requirements increase in diabetic patients as chronic kidney disease progresses
C. Colchicine can be used during acute gout attacks
D. Low doses of allopurinol are effective in preventing gout attacks
E. Lipid metabolism abnormalities may occur

147. Risk factors for the development of calciphylaxis in chronic kidney disease patients include:
A. Hyperparathyroidism
B. Erythropoietin treatment

C. Elevated serum phosphorus levels
D. Treatment with phosphate binders
E. Gout

148. The following statements about anemia in chronic kidney disease are true:
A. The main mechanism is erythropoietin deficiency
B. The anemia is usually hypochromic, microcytic
C. Treatment is done with synthetic human erythropoiesis-stimulating agents
D. Hemoglobin target in treated patients should exceed 120 g/L
E. Hemodialysis can cause some degree of hemolysis leading to anemia

149. Late complications in kidney transplant patients include:
A. Lymphoproliferative disorders
B. Acute rejection
C. Osteoporosis
D. Recurrence of the primary renal disease
E. Cardiovascular diseases

150. The following statements about chronic kidney disease staging are true:
A. Chronic kidney disease has 4 stages
B. Stage G3 corresponds to a glomerular filtration rate below 15 ml/min/1.73 m^2
C. Patients are staged based on both glomerular filtration rate and albuminuria
D. Stage G3b corresponds to a glomerular filtration rate of 30–44 ml/min/1.73 m^2
E. Stage G2 corresponds to a glomerular filtration rate of 60–89 ml/min/1.73 m^2.

ANSWERS CAP. V - NEFROLOGIE

1	E	40	A, D, E	79	A, C, D, E	118	B
2	B	41	A, B	80	A, B, E	119	D
3	A	42	B, C, E	81	B, C, E	120	D
4	A	43	B, C, D, E	82	A, B, C, D	121	B
5	D	44	A, B	83	B, C, E	122	C
6	C	45	C, D, E	84	B, C, D	123	B
7	B	46	C, D, E	85	B, D	124	B
8	A	47	A, B, D	86	A, B, C, D	125	E
9	D	48	C	87	A, B, D	126	A, C, D
10	C	49	D	88	B, D, E	127	B, D
11	C	50	C	89	A, B, D, E	128	C, D
12	E	51	D	90	B, C, D	129	C, D
13	B, C, D	52	A	91	A, B, D	130	D, E
14	A, D	53	A, B, D	92	A, B, E	131	A, C
15	A, C, D, E	54	A, B, D, E	93	A, B	132	C, D, E
16	A, B, C, D	55	A, B, C, D	94	B, C	133	A, B, D
17	A, B, C, E	56	A, C, D	95	A, C, D	134	A, B, D, E
18	A, B, C, D	57	B, C, E	96	B, C, E	135	B, C, D, E
19	A, C, D	58	A, B, E	97	B, C	136	B, C
20	B, E	59	A, C	98	A, B, C, E	137	B, D, E
21	A, C, D	60	A, B, C, E	99	A, C, D	138	C, D
22	A, B, C	61	C, D, E	100	A, C, E	139	A, B, D
23	A, D	62	B, D	101	A, B, D	140	B, D
24	B, D, E	63	B, D, E	102	A, B, D	141	A, B, D
25	C, D, E	64	A, C	103	A, C, E	142	A, B, C, D
26	A, B, D, E	65	B, D	104	A, D	143	A, C
27	A, B, D	66	A, C, E	105	B, C, E	144	A, C, D
28	B, C, D, E	67	C	106	B, C, D, E	145	B, C, D
29	D, E	68	D	107	A, C	146	A, C, D, E
30	A, B, E	69	E	108	A, B, C	147	A, C
31	A, B, C, D	70	A	109	B, E	148	A, C, E
32	A, D	71	B	110	A, B	149	A, C, D, E
33	A, B, C, D	72	A	111	B	150	C, D, E
34	A, B, D	73	E	112	D		
35	C, D	74	D	113	A, D, E		
36	A, B, C	75	E	114	D, E		
37	C, D	76	B	115	A, B, C		
38	A, B, E	77	C	116	B, D		
39	A, B, D, E	78	B, C, D	117	C		

CHAP. VI - PNEUMOLOGY

1. *Symptoms of bronchial asthma do not include:
   A. Wheezing
   B. Chest tightness
   C. Orthopnea
   D. Dyspnea
   E. Cough

2. *Asthma can be classified based on:
   A. Its triggering factors
   B. Age of onset
   C. Inflammatory subtype
   D. Response to treatment
   E. All of the above are correct

3. *Step 2 therapy in bronchial asthma includes:
   A. Initial add-on therapy
   B. Low-dose inhaled corticosteroids (ICS)
   C. Medium-dose inhaled corticosteroids (ICS)
   D. Leukotriene receptor antagonists
   E. Long-acting β2-agonists (LABA)

4. *The false statement regarding treatment with inhaled corticosteroids in asthma patients is:
   A. All patients with regular persistent symptoms (even mild) require chronic treatment with inhaled corticosteroids
   B. Beclomethasone dipropionate (BDP) is the most commonly used inhaled corticosteroid
   C. Beclomethasone doses are 50, 100, 200, and 250 μg/puff
   D. Other inhaled corticosteroids include formoterol and salmeterol
   E. The ICS dose should be stepped down once asthma is controlled

5. Choose the correct statements regarding bronchial asthma:
   A. Diffuse airway obstruction is spontaneously or treatment-irreversible
   B. Bronchial hyperreactivity (BHR) to a wide range of stimuli is present
   C. Bronchial inflammation involves T lymphocytes, mast cells, and eosinophils
   D. Bronchial inflammation is associated with edema, smooth muscle hypertrophy, and mucus plug formation
   E. In long-standing asthma, inflammation may be accompanied by irreversible diffuse bronchial obstruction

6. Triggering factors for bronchial asthma may include:
   A. Occupational sensitizers
   B. Air pollution and irritating particles, vapors, and fumes
   C. Emotions and diet
   D. Medications: statins and antibiotics
   E. Genetic factors

7. Controlling external factors in asthma treatment involves:
   A. If specific allergenic triggers are identified, they should be avoided as much as possible
   B. Sublingual immunotherapy (SLIT) with house dust mite allergens is not recommended in children
   C. Active and passive smoking should be avoided
   D. Cyclooxygenase-2 (COX-2) inhibitors should be avoided
   E. About one-third of individuals sensitized to occupational agents may be cured if they permanently avoid exposure

8. Symptoms of bronchial asthma:
   A. Are episodic
   B. Do not worsen at night, especially in uncontrolled asthma
   C. Cough is a common symptom (sometimes predominant, especially in children)
   D. Asthma episodes vary greatly in frequency and duration
   E. There are few triggering factors for asthma episodes

9. A trial treatment with oral corticosteroids in a patient suspected of having asthma:
   A. Targets patients with mild diffuse bronchial obstruction
   B. Consists of oral prednisone 30 mg daily for 2 weeks, with pulmonary function measured before and immediately after the course
   C. Reversibility of bronchial obstruction is documented by substantial FEV_1 improvement (>15%) and predicts a favorable response to inhaled corticosteroids
   D. The course duration is 6 weeks; oral corticosteroids can be abruptly stopped without tapering
   E. In those with a favorable response, oral corticosteroids should be replaced with inhaled corticosteroids

10. Patients with severe asthma exacerbation present the following characteristics:
   A. Respiratory rate ≤25 breaths/min
   B. Tachycardia ≥110 beats/min
   C. Absence of pulsus paradoxus
   D. PEF 33–50% of predicted or personal best value
   E. Inability to complete a sentence in a single breath

11. Pulmonary function tests in bronchial asthma are characterized by:
    A. Peak expiratory flow (PEF) measurements taken upon waking, before bronchodilator use, before bedtime, and after bronchodilator use are useful in demonstrating the variability of airflow limitation
    B. Diurnal PEF variation is a good indicator of asthma activity and useful in long-term disease monitoring and treatment response
    C. Spirometry is especially useful in evaluating airway obstruction reversibility
    D. Asthma diagnosis can be made by demonstrating an increase in FEV_1 of more than 20% on spirometry after bronchodilator administration
    E. Carbon monoxide diffusion test (DLCO) values are not normal in asthma

12. Select the false statements about hospital management of severe asthma exacerbation:
    A. Oxygen is not administered at 40–60%
    B. Nebulization with 5 mg salbutamol or 10 mg terbutaline is repeated and then administered every 12 hours
    C. Ipratropium bromide 0.5 mg via nebulization is added to salbutamol/terbutaline
    D. Hydrocortisone 200 mg i.v. is administered
    E. Oral prednisone is continued at 40–60 mg/day for at least 5 days

13. Select the false statements about the goals of asthma treatment:
    A. Eliminate symptoms
    B. Restore normal or best possible lung function
    C. Increase the risk of severe exacerbations
    D. Allow for normal growth in children
    E. Increase absenteeism from school or work

14. Asthma treatment:
    A. Asthma should be self-managed by the patient with regular monitoring using a peak flow meter
    B. Anti-inflammatory (controller) therapy should not be initiated in mild forms
    C. Short-acting bronchodilators (e.g., salbutamol and terbutaline) should be used only for persistent symptom relief
    D. Increasing use of bronchodilator medication for more frequent symptoms is a sign of favorable disease progression
    E. Is administered in therapeutic steps

15. Rescue or controller medication with long-acting effects includes:
    A. Inhaled β2-agonists (e.g., salbutamol, terbutaline)
    B. Inhaled long-acting β2-agonists (e.g., salmeterol, formoterol)
    C. Inhaled corticosteroids (e.g., beclomethasone, budesonide, fluticasone)
    D. Combinations of long-acting β2-agonists and inhaled corticosteroids (e.g., salmeterol and fluticasone)
    E. Oral corticosteroids (e.g., prednisone 40 mg daily)

16. Features indicating a life-threatening, very severe asthma exacerbation include:
    A. Elevated PaO_2 >85 mmHg
    B. Elevated $PaCO_2$ >45 mmHg
    C. Severe hypoxemia: PaO_2 <60 mmHg despite oxygen therapy
    D. Decreased or decreasing arterial pH
    E. Normal blood gas values

17. *The average rate of pulmonary function decline in COPD patients is:
    A. 100 mL/year
    B. 20 mL/year
    C. 80 mL/year
    D. 40–50 mL/year
    E. 30 mL/year

18. *Respiratory infections in COPD patients:
    A. Rarely cause exacerbations of the disease
    B. Are definitively responsible for progressive airway obstruction
    C. Prompt antibiotic treatment and influenza/pneumococcal vaccination are recommended
    D. All of the above statements are correct
    E. None of the above statements are correct

19. *Which of the following drugs does not belong to the class of bronchodilators:
    A. Salbutamol
    B. Tiotropium
    C. Roflumilast
    D. Long-acting anticholinergics
    E. Theophylline

20. *Regarding home non-invasive ventilation, the following statement is false:
    A. It is commonly used at night
    B. It delivers negative pressure at different levels during inspiration and expiration
    C. It improves quality of life
    D. It improves survival in patients who use it
    E. It prolongs survival in patients with neuromuscular diseases

21. Choose the correct statements regarding COPD:
    A. It is characterized by completely reversible airway obstruction
    B. The obstruction is usually progressive
    C. It is associated with an abnormal inflammatory response of the lungs to harmful particles and gases
    D. Inhalation of smoke from biomass fuel combustion is the main etiologic factor in

developed countries
E. There is an individual predisposition to develop the disease

22. Endobronchial biopsies from COPD patients have shown a predominance of the following inflammatory cell types:
A. Basophils
B. Neutrophils
C. Reticulocytes
D. CD8+ lymphocytes
E. Mast cells

23. Emphysema can be classified by distribution into:
A. Centriacinar emphysema
B. Panacinar emphysema
C. Irregular emphysema
D. Periacinar emphysema
E. Paracinar emphysema

24. The clinical picture of COPD includes:
A. Chronic cough
B. Hemoptysis
C. Seromucous expectoration
D. Dyspnea
E. Chest pain

25. Systemic effects of COPD include:
A. Arterial hypertension
B. Renal failure
C. Depression
D. Osteoporosis
E. Right heart failure

26. On physical examination of a COPD patient, the following may be observed:
A. Digital clubbing
B. Pectus excavatum
C. Tachypnea and prolonged expiration
D. Large costal respiratory excursions
E. Use of accessory respiratory muscles

27. The diagnosis of COPD is based on a history of:
A. Dyspnea
B. Dry cough

C. Smoking
D. Productive cough
E. Pleuritic chest pain

28. In COPD, pulmonary function tests show:
A. Diffuse airway restriction
B. Diffuse airway obstruction
C. Normal carbon monoxide transfer factor
D. Reversible obstruction (FEV_1 change >12%)
E. Decreased FEV_1/FVC ratio

29. The following statements regarding COPD treatment are true:
A. Smoking cessation is recommended
B. Pneumococcal vaccination is contraindicated
C. Only short-acting bronchodilators are used
D. Use of long-acting anticholinergics prevents FEV_1 decline
E. Long-acting theophylline preparations offer limited benefit in COPD

30. Recommendations for home oxygen therapy include:
A. COPD with PaO_2 >55 mmHg (7.3 kPa) when the patient is clinically stable
B. COPD associated with secondary polycythemia, nocturnal hypoxemia, peripheral edema, pulmonary hypertension, with PaO_2 between 55 and 60 mmHg
C. Diffuse lung disease with PaO_2 >60 mmHg (8 kPa) and patients with disabling dyspnea and PaO_2 <60 mmHg (8 kPa)
D. Lung cancer with disabling dyspnea
E. Presence of obstructive sleep apnea despite continuous positive airway pressure therapy, after evaluation by a specialist

31. The following statements regarding COPD exacerbations are true:
A. They can be precipitated only by bacterial infections
B. Symptoms include: dyspnea, acute bronchospasm, and cough
C. They can only cause type II respiratory failure
D. In type II respiratory failure, $PaCO_2$ is decreased and the patient is dependent on the hypoxic drive
E. In patients at risk of hypercapnia, oxygen therapy is adjusted to maintain saturation in the 88–92% range

32. In the case of a COPD exacerbation in a patient with pH < 7.35, PaO_2 < 60 mmHg (8 kPa), $PaCO_2$ > 49 mmHg (6.5 kPa):
A. Oxygen therapy is administered to maintain saturation within the normal range
B. Nebulized treatment and corticosteroids should be continued
C. Arterial blood gas analysis should be repeated in 15–20 minutes

D. Oxygen therapy is administered to maintain a target saturation of 88–92%
E. If pH remains < 7.35 and $PaCO_2$ > 49 mmHg (6.5 kPa), non-invasive ventilation should be considered

33. *The following are local complications of pneumonia, except:
A. Pleural effusion
B. Empyema
C. Sepsis
D. Lung abscess
E. Organizing pneumonia

34. *Legionella pneumonia is characterized by the following, except:
A. Lymphopenia without marked leukocytosis
B. Hyponatremia
C. Hypoalbuminemia
D. Elevated serum transaminases
E. Leukocytosis

35. *One of the most common opportunistic infections encountered in clinical practice is caused by:
A. Streptococcus pneumoniae
B. Legionella
C. Mycoplasma
D. Pneumocystis jirovecii
E. Anaerobic bacteria

36. Causes of slow-resolving pneumonia include:
A. Appropriate and complete antimicrobial treatment
B. Associated pleurisy
C. Pulmonary thromboembolism
D. Absence of comorbidities
E. Bronchiectasis

37. In a patient with community-acquired pneumonia and CURB-65 score = 2:
A. Mortality is 5%
B. Microbiological testing is not necessary
C. Hospitalization is not required
D. Blood cultures are recommended
E. Hospitalization is recommended

38. Causes of lung abscess include:
A. Properly treated community-acquired pneumonia

B. Aspiration pneumonia
C. Pneumonia due to Streptococcus pneumoniae
D. Septic emboli containing staphylococci
E. Foreign body aspiration

39. The development of empyema is associated with:
A. Complications such as fibrous pleuritis, prolonged hospitalization, and risk of death
B. Exudative pleural effusion with pH < 7.2 in pleural fluid
C. Exudative pleural effusion with pH > 7.2 in pleural fluid
D. Persistent fever
E. Presence of simple exudative pleural effusion

40. Microorganisms involved in nosocomial pneumonia include:
A. *Haemophilus influenzae*
B. Gram-negative bacteria (*Pseudomonas spp.*, *Escherichia spp.*, *Klebsiella spp.*)
C. Anaerobic bacteria (*Enterobacter spp.*)
D. *Staphylococcus aureus* (including methicillin-resistant *S. aureus*)
E. *Acinetobacter spp.*

41. The following statements about Pneumocystis jirovecii pneumonia are true:
A. It is one of the most common opportunistic infections encountered in clinical practice
B. First-line treatment is with high-dose co-trimoxazole
C. First-line treatment is with oral amoxicillin 500 mg three times daily
D. Typical chest X-ray appearance shows bilateral diffuse alveolar and interstitial opacities
E. It is associated with cavity formation visible on chest X-ray or CT scan, often with fluid levels

42. The following statements about ventilator-associated pneumonia (VAP) are true:
A. It occurs in the context of mechanical ventilation in intensive care units
B. It is caused by opportunistic pathogens (ubiquitous in the environment)
C. Frequently caused by Gram-negative microorganisms with multiple antibiotic resistance
D. Often due to anaerobes and can progress to lung abscess
E. Requires careful antibiotic selection in collaboration with a clinical microbiologist

43. Aspiration pneumonia:
A. Results from the aspiration of gastric contents into the lungs
B. Most frequently affects the upper lobe
C. Often has a favorable course without complications
D. Can progress to lung abscess or bronchiectasis
E. In mild to moderate forms, amoxicillin/clavulanate is used

44. *The following statement about tuberculosis is false:
A. One third of the world's population is infected
B. Most cases occur in Europe
C. The incidence of multidrug-resistant cases is increasing
D. It is caused by *Mycobacterium tuberculosis*
E. Along with HIV co-infection, it contributes to a significant healthcare burden

45. *The following statement regarding bacteriological diagnosis in tuberculosis is false:
A. Samples must be processed within 24 hours
B. Auramine-rhodamine staining is more sensitive (though less specific) than Ziehl–Neelsen staining
C. Most developed countries use solid media culture exclusively for mycobacteria
D. *Mycobacterium tuberculosis* growth time on solid culture media is 3–8 weeks
E. Culture allows testing for antibiotic sensitivity of the infecting strain

46. *Multidrug-resistant tuberculosis (MDR-TB) is defined as:
A. Resistance to both rifampin and isoniazid
B. High-level resistance to isoniazid and fluoroquinolones
C. Resistance to rifampin, isoniazid, fluoroquinolones, and at least one injectable drug such as amikacin, capreomycin, or kanamycin
D. Resistance to injectable drugs such as amikacin, capreomycin, or kanamycin
E. Resistance to pyrazinamide and ethambutol

47. *Mycobacterium tuberculosis* has the following characteristics:
A. It is an anaerobic pathogen
B. It is transmitted via airborne route
C. A large number of bacteria must be inhaled to cause infection
D. It does not cause disease in all those infected
E. It is called "acid-alcohol-fast bacillus"

48. The Ghon focus in pulmonary tuberculosis:
A. Consists of multiple apical cavities
B. May appear as a calcified nodule
C. Initially represents granulomatous lesions with caseous necrosis and Langhans giant cells
D. May contain dormant bacilli
E. Never calcifies

49. To confirm pulmonary tuberculosis, bacteriological examination (microscopy and culture) can be performed from:
A. Sputum (≥ two samples decreases diagnostic yield)
B. Sputum (≥ two samples increases diagnostic yield)

C. Induced sputum
D. Bronchoalveolar lavage fluid if productive cough and sputum induction are possible
E. Bronchoalveolar lavage fluid if non-productive cough and sputum induction are not possible

50. The following statements about lymph node tuberculosis are true:
A. Lymph nodes are the second most common site of TB
B. Intrathoracic lymph nodes are more frequently affected than extrathoracic ones
C. It usually presents as a firm, painless cervical or supraclavicular adenopathy
D. The peripheral area of the lymph node may become necrotic and liquefy
E. The overlying skin is often indurated

51. Confirmation of cerebral tuberculosis diagnosis:
A. Requires patient case review and imaging in a multidisciplinary neurology/neurosurgery board
B. Never considers brain biopsy
C. Is supported by very low CSF protein levels
D. Is supported by CSF glucose <½ of blood glucose
E. Is characterized by CSF lymphocytosis

52. The following principles in tuberculosis treatment are correct:
A. Patients with drug-sensitive tuberculosis require 3 months of treatment
B. Isoniazid, rifampin, pyrazinamide, and ethambutol are first-line antituberculous drugs
C. In central nervous system tuberculosis, the recommended treatment duration is at least 12 months
D. Patients with drug-sensitive TB require a minimum of 9 months of treatment
E. All patients should be tested for HIV and chronic hepatitis before starting treatment

53. Latent TB infection (LTBI) can be treated with:
A. Isoniazid monotherapy for 3 months
B. Rifampin monotherapy for 3 months
C. Pyrazinamide and rifampin for 3 months
D. Isoniazid monotherapy for 6 months
E. Isoniazid and rifampin for 3 months

54. A false-negative tuberculin skin test (TST) is commonly seen in:
A. Patients immunosuppressed due to HIV infection (CD4+ <200/mm^3)
B. Patients on immunosuppressive therapy (chemotherapy, anti-TNF, corticosteroids)
C. Patients at extreme ages
D. Patients with cross-reactivity to non-tuberculous mycobacteria
E. Patients with active tuberculosis

55. *Squamous cell lung carcinoma:
A. Metastasizes early
B. May present with cavities with central necrosis
C. Is a rare subtype in Europe
D. Arises from mucus-secreting glandular cells
E. Is common in non-smokers

56. *Dyspnea in bronchopulmonary neoplasms:
A. Is among the non-metastatic extrapulmonary manifestations of bronchial carcinoma
B. Occurs only in patients with COPD associated with lung cancer
C. The presence of pleural effusion does not influence the severity of dyspnea
D. Is caused by mediastinal lymph nodes or direct tumor invasion compressing the left recurrent laryngeal nerve
E. Is due to central tumors obstructing large airways, causing lung collapse

57. *Mesothelioma:
A. Is a benign tumor originating from mesothelial cells of the parietal or visceral pleura
B. Most frequently presents with dyspnea
C. Is associated with asbestos exposure
D. Diagnosis is based on clinical signs from pleural effusion
E. Ultrasound-guided or VATS pleural biopsy is exceptionally performed when pleural fluid cytology is inconclusive

58. *Solitary pulmonary nodule:
A. Is an opacity measuring between 3 and 4 cm
B. Differential diagnosis includes pulmonary metastases, benign tumors, granulomas
C. Is evaluated through imaging methods such as chest X-ray
D. Malignancy risk is assessed by repeated CT scans at scheduled intervals
E. Malignancy risk is very high

59. *Treatment of bronchopulmonary neoplasms:
A. Curative-intent radiotherapy is the treatment of choice when surgery is not feasible due to tumor size
B. In patients without significant cardiovascular or respiratory comorbidities, stereotactic ablative radiotherapy may be used
C. Adjuvant chemotherapy and radiotherapy do not improve average response rates in NSCLC
D. Curative-intent surgery is performed in early-stage NSCLC (stage I, II, and selected IIIA cases)
E. Laser therapy, cryotherapy, and tracheobronchial stents are used as curative treatment in lung cancer patients with airway narrowing due to intraluminal tumor or extrinsic compression

60. The following environmental factors are involved in the development of bronchopulmonary cancer:
A. Pre-existing lung diseases
B. Radon exposure
C. Petroleum products
D. Pulmonary fibrosis
E. HIV infection

61. Activating mutations of the epidermal growth factor receptor (EGFR) in bronchopulmonary cancer are:
A. Found in smokers
B. Common in males
C. Frequently found in young people
D. Frequently found in non-smokers
E. Common in females

62. Local effects of bronchopulmonary cancer:
A. A persistent cough lasting more than 3 weeks indicates the need for a chest X-ray
B. Dyspnea is the most frequently encountered symptom in bronchopulmonary cancer
C. Large mediastinal lymphadenopathies cause intense chest pain
D. Wheezing is monophonic when the tumor partially obstructs the airways
E. Hemoptysis occurs due to tumor-related bleeding

63. Non-small cell lung carcinoma (NSCLC):
A. Is subclassified into squamous cell carcinoma, adenocarcinoma, and small cell carcinoma
B. Large cell carcinoma metastasizes early
C. Adenocarcinoma is the most frequent type of cancer among smokers
D. Squamous cell carcinoma metastasizes early
E. Adenocarcinoma often metastasizes to the pleura and bones

64. Small cell lung carcinoma (SCLC):
A. Has an incidence of 10–15%
B. Originates from neuroendocrine cells
C. Originates from mucus-secreting glandular cells
D. Metastasizes late
E. Frequently develops centrally

65. Bronchopulmonary cancer frequently metastasizes to:
A. Heart
B. Adrenal glands
C. Pleura

D. Kidneys
E. Bones

66. Neurological manifestations caused by bronchopulmonary cancer include:
A. Subacute cerebellar degeneration
B. Acanthosis nigricans
C. Myelopathies
D. Disseminated intravascular coagulation
E. Syndrome of inappropriate antidiuretic hormone secretion (SIADH)

67. Extrapulmonary non-metastatic manifestations of bronchopulmonary cancer include:
A. Cutaneous – frequently encountered
B. Metabolic – weight loss, anorexia
C. Bone – digital clubbing
D. Vascular and hematological – hemolytic anemia, fatigue
E. Neurological – polymyopathy, myasthenic syndrome (Lambert-Eaton Syndrome)

68. Regarding imaging investigations used in the diagnosis of bronchopulmonary cancer, we can state:
A. Chest X-ray can reveal specific changes
B. CT scan shows the extent of the disease
C. CT scan precisely determines the malignancy of enlarged lymph nodes
D. MRI is useful in diagnosing primary bronchopulmonary tumors
E. Simple chest X-ray sometimes reveals clear evidence of lung cancer

69. Treatment of bronchopulmonary cancer:
A. Surgical treatment is indicated in advanced stages
B. Curative-intent radiotherapy plays a role in symptom relief
C. Adjuvant chemotherapy and radiotherapy prolong median survival in non-small cell lung cancer
D. Immunotherapy with PD-L1 inhibitors offers a therapeutic option for specific patient groups
E. Bone pain does not respond to radiotherapy

70. TNM staging of bronchopulmonary cancer:
A. Tx – primary tumor cannot be assessed
B. N – defines the presence of distant metastases
C. N0 – no regional lymph node metastases
D. T4 – tumor larger than 7 cm
E. M1 – distant metastases present

71. Pulmonary secondary tumors:
    A. Are identified on chest CT
    B. Are rare
    C. The primary tumor is usually located in the prostate, breast, gastrointestinal tract, or ovary
    D. Multiple pulmonary metastases can be surgically removed
    E. Chest X-ray detects small metastases

72. Bronchial carcinoid tumors:
    A. Are usually low-grade malignant tumors
    B. Grow rapidly
    C. Cause specific symptoms
    D. Surgical treatment is not the therapy of choice
    E. Histologic appearance can range from low-grade typical to atypical tumors

73. Histological and cytological diagnosis of bronchopulmonary cancer is obtained through:
    A. Ultrasound-guided transbronchial needle biopsy of pulmonary lesions
    B. CT-guided transthoracic needle biopsy of pulmonary lesions
    C. Fiberoptic bronchoscopy
    D. Ultrasound-guided thoracentesis
    E. Ultrasound-guided transthoracic needle biopsy of lymph nodes

ANSWERS CHAP. VI - PNEUMOLOGY

1	C
2	E
3	B
4	D
5	B, C, D, E
6	A, B, C
7	A, C, E
8	A, C, D
9	B, C, E
10	B, D, E
11	A, B, C
12	A, B
13	C, E
14	A, C, E
15	B, C, D
16	B, C, D
17	D
18	C
19	C
20	B
21	B, C, E
22	B, D
23	A, B, C
24	A, C, D
25	A, C, D, E
26	C, E
27	A, C, D
28	B, E
29	A, E
30	B, D, E
31	B, E
32	B, D, E
33	C
34	E
35	D
36	B, C, E
37	D, E
38	B, D, E
39	A, B, D
40	B, C, D, E
41	A, B, D
42	A, C, E
43	A, D, E
44	B
45	C
46	A
47	B, D, E
48	B, C, D
49	B, C, E
50	A, C, E
51	A, D, E
52	B, C, E
53	D, E
54	A, B, C, E
55	B
56	E
57	C
58	B
59	D
60	B, C
61	D, E
62	A, D, E
63	B, E
64	B, E
65	B, C, E
66	A, C
67	B, C, E
68	B, E
69	C, D
70	A, C, D, E
71	A, C
72	A, E
73	B, C, D, E

CHAP. VII - HEMATOLOGY

1. *The following are diagnostic tests for the evaluation of iron deficiency anemia, except:
   A. Serum ferritin
   B. Complete blood count
   C. Beta-2 microglobulin
   D. Total iron-binding capacity and serum iron
   E. Peripheral blood smear

2. *Which of the following are forms of iron storage:
   A. Hemoglobin and serum iron
   B. Ferritin and transferrin
   C. Myoglobin and TIBC
   D. Ferritin and hemosiderin
   E. TIBC and serum iron

3. *The causes of iron deficiency anemia include the following, except:
   A. Blood loss
   B. Hepatomegaly
   C. Decreased absorption (e.g., post-gastrectomy)
   D. Reduced intake
   E. Increased demands (e.g., pregnancy)

4. *In megaloblastic anemia, the peripheral blood smear characteristically reveals:
   A. Tear-drop red blood cells
   B. Target cells
   C. Blasts
   D. Macro-ovalocytes with hypersegmented neutrophil nuclei
   E. Atypical lymphocytes

5. *The most common cause of vitamin B12 deficiency in adults is:
   A. Iron deficiency anemia
   B. Pernicious anemia
   C. Aplastic anemia
   D. Refractory anemia with ring sideroblasts
   E. Hemolytic anemia

6. *Characteristically, paraclinical investigations in megaloblastic anemia reveal:
   A. Increased MCV (mean corpuscular volume), most often over 96 fL
   B. Leukocytosis
   C. Thrombocytosis

D. Polycythemia
E. Decreased MCV, often below 96 fL

7. What are the most common causes of failure in oral iron therapy?
   A. Incorrect diagnosis
   B. Ongoing blood loss
   C. Adherence to medical treatment
   D. Lack of compliance
   E. Folate deficiency

8. The following are known clinical features of iron-deficiency anemia:
   A. Koilonychia
   B. Facial erythema
   C. Angular stomatitis
   D. Brittle hair and nails
   E. Fever

9. The differential diagnosis of microcytic, hypochromic anemia includes:
   A. Hodgkin’s lymphoma
   B. Anemia of chronic disease
   C. Septic shock
   D. Thalassemia
   E. Sideroblastic anemia

10. Which of the following statements regarding iron deficiency are true:
    A. Mean corpuscular volume is decreased
    B. Soluble transferrin receptors are increased
    C. Presence of iron in erythroblasts
    D. Mean corpuscular volume is increased
    E. Soluble transferrin receptors are normal

11. Characteristics of factors that influence iron absorption include:
    A. Non-heme iron is absorbed better than heme iron
    B. Gastric acidity helps maintain iron in ferrous and soluble form in the upper intestine
    C. Heme iron is absorbed better than non-heme iron
    D. Iron absorption is increased in the context of low iron stores and increased erythropoietic activity (e.g., bleeding)
    E. Ferric iron is absorbed better than ferrous iron

12. The positive diagnosis of iron deficiency anemia is based on:
    A. Complete blood count and blood smear

B. Direct Coombs test
C. Total bilirubin
D. Serum ferritin
E. Hemoglobin electrophoresis

13. The peripheral blood smear in iron deficiency anemia shows:
A. Macrocytosis
B. Hyperchromic erythrocytes
C. Poikilocytosis
D. Variations in the shape and size of erythrocytes
E. Anisocytosis

14. Side effects of oral iron preparations in iron deficiency anemia include:
A. Weight loss
B. Diarrhea
C. Frequent urination (pollakiuria)
D. Constipation
E. Nausea

15. Which of the following statements about iron treatment are true:
A. Injectable iron is indicated in patients intolerant to oral preparations
B. Iron stores are replenished faster with oral than with parenteral administration
C. Parenteral administration is indicated in patients with severe malabsorption
D. Oral iron is not discontinued when parenteral iron is administered
E. Injectable iron is indicated in patients with chronic diseases (e.g., inflammatory bowel disease)

16. The most common pathological causes of macrocytosis without megaloblastic changes are:
A. Alcohol excess
B. Liver disease
C. Reticulocytosis (secondary to hemolysis)
D. Hyperthyroidism
E. Ionizing radiation

17. Megaloblastic changes occur in:
A. Iron deficiency or abnormal iron metabolism
B. Vitamin B12 deficiency or abnormal B12 metabolism
C. Folate deficiency or abnormal folate metabolism
D. Liver disease
E. Reticulocytosis (due to hemolysis)

18. Pernicious anemia:
    A. Is an inherited disease
    B. Is an autoimmune disorder
    C. Is not associated with other autoimmune diseases
    D. Is associated with other autoimmune diseases, especially thyroid disease, Addison's disease, and vitiligo
    E. Is characterized by atrophic gastritis with loss of parietal cells in the gastric mucosa and consequently failure to produce intrinsic factor and malabsorption of vitamin B12

19. Causes of folate deficiency include:
    A. Obesity
    B. Pregnancy
    C. Gastrointestinal pathology (Celiac disease, Crohn's disease)
    D. Veganism
    E. Alcohol consumption

20. The clinical picture of megaloblastic anemia due to folic acid deficiency is characterized by:
    A. Often asymptomatic clinical picture
    B. Anemia symptoms
    C. Symptoms of the underlying disease, such as malignancies with increased cellular turnover
    D. Neuropathy
    E. Paraplegia

21. Specific clinical features of severe vitamin B12 deficiency (<60 ng/L or 50 pmol/L) include:
    A. Polyneuropathy
    B. Symmetrical paresthesias in fingers and toes
    C. Weight loss
    D. Dementia, psychiatric symptoms, hallucinations
    E. Profuse night sweats

22. Specific antibodies that may be present in pernicious anemia include:
    A. Anti-parietal cell antibodies
    B. Anti-nucleocapsid antibodies
    C. Anti-intrinsic factor antibodies
    D. Anti-phospholipid antibodies
    E. Anti-cyclic citrullinated peptide antibodies

23. Causes of vitamin B12 deficiency include:
    A. Vegetarian diet
    B. Gastrectomy
    C. Pernicious anemia
    D. Hepatitis C virus infection
    E. Hepatitis B virus infection

24. Management of folic acid deficiency includes:
    A. Daily administration of 5 mg folic acid for about 4 months to replenish body stores
    B. Prophylactic administration in women planning pregnancy or in early pregnancy to reduce neural tube defects
    C. Prophylactic administration in postmenopausal women
    D. Lifelong continuous administration of folic acid
    E. Prophylactic administration in patients with chronic hematologic diseases and high cell turnover

25. *Autoimmune hemolytic anemias are conditions:
    A. Acquired, due to increased erythrocyte destruction caused by autoantibody formation
    B. Acquired, due to decreased erythrocyte destruction caused by autoantibodies
    C. Congenital
    D. Acquired, due to increased erythrocyte destruction caused by alloantibodies
    E. Acquired, due to decreased erythrocyte destruction caused by alloantibodies

26. *Intravascular hemolysis (lysis of red blood cells in circulation) is caused by:
    A. IgM or IgG erythrocyte antibodies activating complement cascade
    B. IgA or IgD erythrocyte antibodies
    C. Platelet antibodies
    D. Leukocyte antibodies
    E. IgM, IgG, IgA, and IgD erythrocyte antibodies

27. *In warm autoimmune hemolytic anemia, antibodies bind to red cell antigens at a temperature of:
    A. 0°C
    B. 15°C
    C. 25°C
    D. 37°C
    E. All of the above

28. Warm autoimmune hemolytic anemia typically presents with the following clinical features:

A. Jaundice
B. Splenomegaly
C. Glossitis
D. Constipation
E. Infections

29. The paraclinical diagnosis of warm autoimmune hemolytic anemia includes the following investigations:
A. Positive direct antiglobulin test
B. Abdominal CT scan to detect possible abdominal lymphoma
C. Low urea
D. Low creatinine
E. Folates

30. For a definitive diagnosis of warm autoimmune hemolytic anemia, in addition to usual labs, the following are needed:
A. Renal biopsy
B. Chest X-ray
C. Direct antiglobulin test (Direct Coombs)
D. Abdominal CT
E. Spherocytosis

31. Autoimmune hemolytic anemia can be classified as:
A. Warm autoimmune hemolytic anemia
B. Drug-induced immune hemolytic anemia
C. Hemolytic disease of the newborn
D. Cold autoimmune hemolytic anemia
E. Mixed autoimmune hemolytic anemia

32. Warm antibody hemolytic anemia:
A. Is more frequent in middle-aged women
B. May present with brief episodes of anemia and jaundice
C. Occurs only in men
D. Is more frequent in children
E. Is characterized by antibody binding to erythrocyte surface antigens at 10°C

33. Warm antibody autoimmune hemolytic anemia may occur secondary to various underlying conditions, including:
A. Renal failure
B. Carcinomas
C. Diabetes mellitus

D. Rheumatic diseases
E. Lymphoproliferative disorders

34. Treatment of warm antibody autoimmune hemolytic anemia includes:
A. Diuretics
B. Corticosteroids
C. Splenectomy
D. Anti-CD20 monoclonal antibody (Rituximab)
E. Hepatoprotectors

35. Chronic cold agglutinin disease is characterized by:
A. Production of monoclonal IgM cold agglutinins
B. After exposure to cold, the patient develops acrocyanosis
C. Direct antiglobulin test is positive only for complement (C3d)
D. Direct antiglobulin test is positive for IgG
E. Direct antiglobulin test is negative for complement (C3d)

36. The following statements regarding paroxysmal cold hemoglobinuria are true:
A. It is a commonly encountered pathology
B. It is associated with bacterial infections in adults
C. It is associated with common childhood infections such as measles, mumps, and chickenpox
D. The lytic reaction is demonstrated in vitro by the Donath-Landsteiner test
E. Biphase antibodies are present, reacting with red cells in the cold peripheral circulation, with lysis occurring as the cells return to the central circulation

37. Drug-induced immune hemolytic anemia is:
A. Very common
B. Very rare
C. Confirmed by the temporal association between drug administration and hemolytic anemia onset
D. Always fatal
E. None of the above

38. Alloimmune hemolytic anemia is:
A. Seen in transfusion-related hemolysis
B. Defined as the reaction of an individual’s antibodies to another individual’s red cells
C. Defined as the reaction of an individual’s antibodies to their own red cells
D. Frequently seen in lymphoproliferative syndromes
E. Seen in rheumatologic diseases (e.g., lupus, etc.)

39. The clinical picture of paroxysmal nocturnal hemoglobinuria is characterized by:
    A. Intravascular hemolysis
    B. Extravascular hemolysis
    C. Venous thrombosis
    D. Hemoglobinuria (nocturnal urination and first morning urine)
    E. Hemoptysis

ANSWERS CHAP. VII - HEMATOLOGY

1	C
2	D
3	B
4	D
5	B
6	A
7	A, B, D
8	A, C, D
9	B, D, E
10	A, B
11	B, C, D
12	A, D
13	C, D, E
14	B, D, E
15	A, C, E
16	A, B, C
17	B, C
18	B, D, E
19	B, C, E
20	A, B, C
21	A, B, D
22	A, C
23	A, B, C
24	A, B, E
25	A
26	A
27	D
28	A, B
29	A, B
30	C, D, E
31	A, D, E
32	A, B
33	B, D, E
34	B, C, D
35	A, B, C
36	C, D, E
37	B, C
38	A, B
39	A, C, D

CHAP. VIII - NEUROLOGY

1. Coma is defined by the following:
   A. A state in which the patient is unresponsive
   B. It represents the state of consciousness with unresponsiveness to external stimuli
   C. A state of confusion in which the main feature is lack of attention, usually accompanied by disturbances of behavior, cognition and attention
   D. It is represented by sudden paroxysmal attacks of sleep that occur in inappropriate situations
   E. Alteration of the function of the ascending reticular system induces coma

2. The state of coma occurs in the following circumstances
   A. Brainstem lesions
   B. An expansive process at the supratentorial level with a compressive effect on the brainstem
   C. Diffuse cortical lesions
   D. Diabetes mellitus with adequate glycemic control
   E. Ischemic vascular accident at the level of the basal nuclei

3. The following are true about the evolution and prognosis of comatose states:
   A. Metabolic causes have a good prognosis when the causative problem can be corrected
   B. 7% of patients with a comatose state in the context of a stroke recover
   C. 11% of patients with hypoxic ischemic brain injuries occurring after a cardiac arrest recover
   D. 70% of patients with a comatose state in the context of a stroke recover
   E. The vegetative state (VS) is a consequence of diffuse cortical damage

4. In the case of an unconscious patient, monitoring of brain function includes:
   A. Monitoring pupil size and their reaction to light
   B. Divergent eye axes indicate a brainstem lesion
   C. Divergent eye axes indicate a frontal lobe lesion
   D. A frontal lobe lesion causes the conjugate deviation of the eyeballs towards the lesion and towards the paralyzed limbs
   E. "Ping pong" eyes can also be observed in deep coma due to extensive cortical lesions

5. Which statements regarding the vegetative state are correct
   A. Brainstem functions are intact
   B. The patient in a vegetative state may exhibit movements in response to a certain voice
   C. Respiratory function is not preserved

D. The patient in a vegetative state does not show any signs of consciousness or response to environmental stimuli, except for some reflex movements
E. Voluntary vertical movements of the eyeballs or blinking are intact

6. The following are included in the principles of treatment of coma states:
A. Hydration is achieved exclusively by infusions
B. Nutrition - by nasogastric tube or PEG (percutaneous gastrostomy)
C. Avoidance of pressure sores
D. Requires careful care of the airway
E. Oral hygiene - suction of the oral cavity

7. Diffuse cerebral disorders that can determine the comatose state include:
A. Hemorrhage or infarction in the brainstem
B. Status epilepticus
C. Respiratory failure with retention of C02
D. Hyponatremia
E. Encephalitis

8. Signs of lateralization include:
A. Facial asymmetry: salivation or tears on the affected side
B. Asymmetry of osteotendinous reflexes
C. Flat cutaneous reflex in extension - bilateral
D. Asymmetrical response to painful stimuli
E. Generalized hypotonia

9. *Belong to brainstem reflexes, except:
A. Corneal reflex
B. Vomiting reflex
C. Vestibulo-ocular reflex
D. Plantar cutaneous reflex
E. Doll eye reflex

10. *The neurological examination of the comatose patient includes the following, except:
A. Measuring the patient's temperature
B. Glasgow coma scale assessment
C. Fundus assessment
D. Brainstem reflex assessment
E. Eyeball movement assessment

11. *Pathologies that mimic coma include:
A. Locked-in syndrome

B. Severe metabolic acidosis
C. Hypoxic-ischemic brain injury from cardiac arrest
D. Wernicke-Korsakoff syndrome
E. Respiratory failure with CO2 retention

12. *The following can be stated about subarachnoid hemorrhage (SAH):
A. It has a progressive onset, with the maximum amplitude of the headache reaching in approximately 10 minutes
B. It is characterized by the appearance of neck stiffness and the presence of the Kernig sign
C. The specificity of CT to detect SAH is 95% in the first 24 hours of onset
D. Lumbar puncture is mandatory in the first 12 hours
E. Acute bacterial meningitis and endocarditis are common causes of SAH

13. *Acute subdural hematoma:
A. It represents the accumulation of blood in the subdural space following the rupture of a vein
B. It represents the accumulation of blood in the subdural space following rupture of an artery
C. It is frequently found in the elderly and patients on anticoagulant treatment
D. It causes hemiparesis or contralateral sensory deficit and ipsilateral pupillary dilation
E. The Flair sequence on MRI is more sensitive for detecting smaller hematomas, due to the presence of methemoglobin

14. *Stroke is characterized by:
A. Sudden onset focal neurological deficit syndrome caused by cerebral, retinal, or spinal ischemia or hemorrhage
B. Sudden onset focal neurological dysfunction syndrome caused by cerebral or retinal ischemia
C. Presence of symptoms for a maximum of 24 hours
D. Increased incidence among African-American and Caucasian populations
E. Thrombosis in the cerebral venous sinuses, retinal, or spinal

15. *Control of the following risk factors is highly correlated with reducing the risk of hemorrhagic stroke:
A. Hypertension
B. Smoking
C. Alcohol
D. Obesity
E. Lifestyle

16. *The main sources of cerebral embolism are:

A. Cardiac thrombi in patients with myocardial infarction
B. Vegetations in infective endocarditis
C. Atherosclerotic plaques at the arch level aortic
D. Polycythemia
E. All of the above

17. *The following symptoms are part of the clinical features of transient ischemic attack (TIA) in the carotid territory, except:
A. Amaurosis fugax
B. Diplopia
C. Hemiparesis
D. Aphasia
E. Hemianopsia

18. *The differential diagnosis of transient ischemic attack (TIA) is made with:
A. Migraine with aura
B. Focal epilepsy
C. Cerebral amyloid angiopathy
D. Intracranial expansive processes
E. All of the above

19. *The following symptoms are part of the clinical picture of lateral bulbar syndrome, except:
A. Ipsilateral Horner syndrome
B. Vertigo
C. Dysphagia
D. Ipsilateral hemihypoesthesia
E. Contralateral hemihypoesthesia

20. The most common causes of ischemic stroke are represented by:
A. Atheromatosis in proximal internal carotid artery level
B. Intracranial atheromatosis
C. Fat embolism, coronary artery bypass grafting
D. Arterio-arterial embolism
E. Thrombosis of an ulcerated atherosclerotic plaque

21. Control of the following risk factors is moderately correlated with reducing the risk of ischemic stroke:
A. Smoking
B. Alcohol
C. Cholesterol
D. Sleep apnea

E. Severe carotid stenosis

22. The following statements about transient ischemic attack (TIA) are true:
    A. It is not characterized by an infarct area on imaging
    B. Hemiparesis and aphasia are the most common manifestations
    C. An ABCD2 score>4 is associated with an increased risk of stroke in the following week
    D. An ABCD2 score<4 is associated with a decreased risk of stroke in the first 2 days
    E. Investigations performed include Doppler ultrasonography carotid, Holter-ECG, MRI or CT angiography

23. The following symptoms are part of the clinical picture of complete middle cerebral artery (MCA) occlusion:
    A. Ipsilateral hemiparesis
    B. Contralateral central facial paresis
    C. Peripheral facial paresis
    D. Oculocephalogyry deviation towards the side of the lesion
    E. Aphasia in lesions of the dominant hemisphere

24. The following statements are false, except:
    A. Infarctions in the territory of the anterior cerebral artery (ACA) produce predominantly crural hemiparesis
    B. Infarctions in the territory of the lenticulostriate perforating arteries produce contralateral hemiplegia
    C. Infarctions in the territory of the superficial right middle cerebral artery (MCA) produce predominantly right facio-brachial hemiparesis and aphasia
    D. Infarctions in the territory of the right MCA produce predominantly left facio-brachial contralateral hemiparesis, visual neglect and denial disability
    E. Infarctions in the posterior cerebral artery (PCA) territory produce motor, sensory or contralateral sensorimotor hemisyndrome

25. Infarctions in the posterior (vertebro-basilar) territory can cause:
    A. Hemiparesis or tetraparesis by affecting the corticospinal tract
    B. Coma or altered state of consciousness by affecting the reticular formation
    C. Sensory disorders in the face by affecting the medial lemniscus and the spinothalamic tract
    D. Horner syndrome by affecting the cervical parasympathetic fibers
    E. Diplopia by affecting the optic nerve

26. The following statements are true:
    A. Balint syndrome is caused by ischemia in the border region irrigated by the middle cerebral artery (MCA) and the posterior cerebral artery (PCA)

B. Binswanger disease associates dementia, TIA and stroke episodes in hypotensive patients
C. Lacunar infarcts are frequently asymptomatic, having small dimensions <1.5 cm3
D. Anton syndrome occurs in unilateral PCA lesions
E. Borderline infarcts cannot occur due to severe stenosis at the proximal level of the carotid arteries

27. The following investigations are essential in vascular pathology:
A. Doppler ultrasonography in the first 24 hours
B. Cerebral MRI, diffusion-weighted sequence (DWI)
C. Cerebral MRI, perfusion sequence (PWI)
D. Complete blood count, blood glucose and coagulogram
E. Cerebral CT in the acute phase, to highlight the infarction

28. Thrombolysis:
A. Reduces the area of cerebral infarction
B. Has a therapeutic window of 4.5 hours
C. 20% of the total dose must be administered iv as a bolus, in less than 1 minute
D. Performed with tissue plasminogen activators (Alteplase)
E. Performed with tissue plasminogen activators (Tenecteplase)

29. The following are eligibility criteria for initiating intravenous thrombolysis, except:
A. Imaging excludes hemorrhage
B. Stroke symptoms with improvement rapid
C. Persistent systolic blood pressure <185, diastolic <110 mmHg, or not requiring aggressive blood pressure control therapy
D. Persistent systolic blood pressure >185, diastolic >10 mmHg, or not requiring aggressive blood pressure control therapy
E. Clinical diagnosis of ischemic stroke

30. The following are exclusion criteria for initiating intravenous thrombolysis:
A. Platelets <100,000/mm3
B. History of previous intracranial hemorrhage
C. Persistent neurological deficit
D. INR <1.7
E. Patient age

31. The following are part of secondary prevention of stroke:
A. Antiplatelet therapy
B. Decompressive craniectomy
C. Lipid-lowering therapy
D. Antihypertensive therapy

E. Anticoagulant therapy

32. The following can be stated about antiplatelet therapy the following:
    A. They are initiated for ischemic cardioembolic strokes
    B. They are initiated in high doses (300 mg aspirin)
    C. They are initiated in high doses (300 mg clopidogrel)
    D. They are administered if thrombolysis is contraindicated
    E. They are administered before performing brain imaging

33. The following can be stated about anticoagulant therapy, except:
    A. They are initiated in cases of hemorrhagic strokes
    B. They are administered in cases of ischemic strokes of cardioembolic nature, in patients with atrial fibrillation since the onset of symptoms
    C. They are administered within the next 24 hours after thrombolysis
    D. They are administered in cases of cerebral venous thrombosis
    E. Warfarin presents a lower risk of hemorrhage than direct oral anticoagulants

34. Neurological rehabilitation after a stroke involves:
    A. Initiation of physiotherapy in the first weeks after the stroke, in order to prevent spasticity
    B. Social isolation of the patient
    C. Installation of support bars at home
    D. Occupational therapy
    E. Installation of nasogastric tubes or gastrostomy tubes in aphasic patients

35. The following statements about carotid stenoses are not true:
    A. Moderate symptomatic carotid stenoses are associated with an increased risk of stroke recurrence if the patient has had a TIA
    B. Endarterectomy is performed in patients with symptomatic stenoses > 70%, in the first 2 weeks after stroke
    C. The risk of developing a stroke after stenting is lower compared to the surgical alternative
    D. Stenoses < 70% require stenting
    E. Carotid occlusion always requires endarterectomy

36. Among patients with stroke:
    A. 10% die within the first 2 years
    B. Those with hemorrhagic stroke have a higher early mortality than those with ischemic stroke
    C. 30-40% survive for a period of 3 years
    D. Most have disabilities that require institutional care
    E. Those who develop hemiplegia have a poor prognosis

37. Possible causes of cerebral venous thromboses are:
    A. Pregnancy
    B. Hypercoagulable states
    C. Malignant diseases
    D. Migraine
    E. Dehydration

38. The etiology of intracerebral hemorrhage includes:
    A. Hypertension
    B. Cerebral amyloid angiopathy
    C. Arteriovenous malformations
    D. Smoking
    E. Diabetes mellitus

39. Secondary causes of intracerebral hemorrhage include:
    A. Cavernomas
    B. Aneurysms
    C. Dural venous thromboses
    D. Arteriovenous malformations
    E. Smoking

40. *Intracerebral hemorrhages caused by hypertension are located predominantly in:
    A. Meninges
    B. Lepto-meninges
    C. The space subarachnoid
    D. Spinal cord
    E. Basal nuclei

41. *Subarachnoid hemorrhage is:
    A. Accumulation of blood in the cerebral hemispheres
    B. Accumulation of blood in the subdural space
    C. Spontaneous arterial bleeding in the subarachnoid space
    D. Accumulation of blood in the brainstem
    E. Spontaneous bleeding in a tumor

42. Treatment of hemorrhagic stroke is:
    A. There is no treatment for hemorrhagic stroke
    B. Medical
    C. Surgical
    D. Anticoagulant treatment is administered
    E. Blood pressure control is not necessary

43. Causes of subarachnoid hemorrhage are:
    A. Atrial fibrillation
    B. Carotid stenosis
    C. Saccular aneurysm
    D. Arteriovenous malformations
    E. Bacterial infections

44. Clinical features of subarachnoid hemorrhage are:
    A. Usually appears as a very severe headache
    B. Headache has a sudden onset
    C. Headache is usually followed by vomiting and coma
    D. Papilledema and retinal hemorrhage may not occur
    E. Neck stiffness does not occur

45. Investigations of the patient with subarachnoid hemorrhage include:
    A. Electroencephalogram
    B. Nerve conduction velocities
    C. Catheterization angiography
    D. CT angiography
    E. CT imaging

46. Complications of subarachnoid hemorrhage are:
    A. Arterial embolism
    B. Posterior cerebral artery occlusion
    C. Hydrocephalus
    D. Arterial spasm
    E. Arteriovenous malformations

47. Subdural hematoma is characterized by:
    A. Accumulation of blood in the subdural space
    B. Usually occurs after trauma
    C. Headache, drowsiness, and confusion are not common
    D. Focal deficits may not occur
    E. Seizures may not occur epileptic

48. Extradural hemorrhage is characterized by:
    A. Occurs by rupture of a branch of the middle meningeal artery
    B. Requires emergency neurosurgical intervention
    C. Requires CT or MRI imaging
    D. Does not require imaging investigations

E. There is no treatment for this pathology

49. The following statements about cerebral venous thrombosis are correct:
    A. Head trauma cannot be a cause
    B. It is usually associated with a prothrombotic factor
    C. Initial treatment is with heparin
    D. Infection in a paranasal sinus cannot be present
    E. Anticonvulsants are not administered

50. Immediate treatment of suspected meningococcal meningitis at first contact, before other investigations includes:
    A. Vancomycin
    B. Third-generation cephalosporin
    C. Dexamethasone, with or before the first dose of antibiotic
    D. Aspirin
    E. Quinolones

51. Meningeal syndrome includes:
    A. Headache
    B. Aphasia
    C. Neck stiffness
    D. Choreic movements
    E. Ataxia

52. Pathogens that can cause chronic meningitis include:
    A. Influenza A virus
    B. Cryptococcus
    C. Treponema pallidum
    D. Koch's bacillus
    E. Rabies

53. Typical cerebrospinal fluid changes in bacterial meningitis include:
    A. Clear cerebrospinal fluid
    B. Absent polymorphonuclear cells
    C. Protein 0.5-2.0 g/L
    D. Glucose < ½ blood glucose
    E. Monocytes 100-300/mm^3

54. Common clinical signs of encephalitis include:
    A. Fever
    B. Personality and behavioral changes

C. Aphasia (especially in herpetic encephalitis)
D. Tabetic ataxia
E. Sensory deficits in the extremities, distal distribution, bilateral

55. Differential diagnosis of acute meningitis includes:
A. Stroke ischemic
B. Subarachnoid hemorrhage
C. Migraine
D. Myasthenia gravis
E. Guillain-Barré syndrome

56. *A patient with meningeal syndrome presents the following result on cerebrospinal fluid examination: clear appearance, 80 monocytes/mm3, polymorphonuclear absent, protein 0.5 g/L, glucose > ½ blood glucose. The result is suggestive of:
A. Bacterial meningitis
B. Viral meningitis
C. Tuberculous meningitis
D. Brain abscess
E. Cerebrospinal fluid does not present pathological changes

57. *In a patient with acute meningitis with Hemophilus, treatment is recommended with:
A. First-generation cephalosporins (e.g. cefazolin)
B. Fluoroquinolones (e.g. ciprofloxacin)
C. Third-generation cephalosporins (e.g. cefotaxime)
D. Acyclovir
E. Intravenous immunoglobulins.

ANSWERS CHAP. VIII - NEUROLOGY

1	A, E
2	A, B, C
3	A, B, C, E
4	A, B, E
5	A, D
6	B, C, D, E
7	B, C, D, E
8	A, B, C, D
9	D
10	A
11	A
12	B
13	A
14	A
15	A
16	E
17	B
18	E
19	D
20	A, B, D, E
21	B, C, D
22	A, B, E
23	B, D, E
24	A, B, D
25	A, B
26	A, C
27	A, B, D
28	A, B, D
29	B, C, D
30	A, B
31	C, D
32	B, D
33	A, B, C, E
34	A, C, D
35	A, C, D, E
36	B, C, E
37	A, B, C, E
38	A, B, C
39	A, B, C, D
40	E
41	C
42	B, C
43	C, D
44	A, B, C
45	C, D, E
46	C, D
47	A, B
48	A, B, C
49	B, C
50	B, C
51	A, C
52	B, C, D
53	C, D
54	A, B, C
55	B, C
56	B
57	C

CHAP. IX – INFECTIOUS DISEASES

1. * One of the following has prognostic value in sepsis:
   A. Fibrinogen
   B. C-reactive protein
   C. Leukocytosis
   D. Lactate level
   E. Erythrocytes sedimentation rate

2. *Excessive use of broad-spectrum intravenous antibiotics can be associated with infections with:
   A. Pseudomonas
   B. C. difficile
   C. Acinetobacter
   D. Staphylococcus
   E. Pneumococcus

3. *Amoxicillin and ampicillin produce a rash in 90% of patients with:
   A. Meningococcal meningitis
   B. Pneumococcal meningitis
   C. Infectious mononucleosis
   D. Whooping cough
   E. Pertussis

4. * Amoxicillin/clavulanic acid may produce:
   A. Hemolytic jaundice
   B. Cholestatic jaundice
   C. Obstructive jaundice
   D. Jaundice in newborns
   E. Neoplastic jaundice

5. * Sulfamethoxazole is given in combination with:
   A. Azithromycin
   B. Minocycline
   C. Telithromycin
   D. Trimethoprim
   E. Polymyxin

6. * The representative of the monobactam class of antibiotics is:
   A. Ceftaroline

B. Aztreonam
C. Imipenem
D. Teicoplanin
E. Daptomycin

7. *Antibiotic chemoprophylaxis for meningitis caused by Haemophilus influenzae type B, aimed at reducing nasopharyngeal carriage and preventing infection in contacts, in adults is performed with:
A. Rifampicin 600 mg daily for 4 days
B. Azithromycin 500 mg daily for 7 days
C. Metronidazole 250 mg daily for 4 days
D. Trimethoprim/sulfamethoxazole 400/80 mg daily for 5 days
E. Nitrofurantoin 100 mg daily for 14 days

8. *Currently, sepsis is defined as:
A. Life-threatening organ dysfunction caused by a normal host response to infection
B. Life-threatening organ dysfunction caused by an abnormal host response to infection
C. An upper respiratory tract infection
D. A chronic infection
E. Acute inflammation

9. *Doxycycline is:
A. A carbapenem
B. A fluoroquinolone
C. An aminoglycoside
D. A tetracycline
E. A penicillin

10. *Rifaximin:
A. Is a rifampicin derivative with low intestinal absorption
B. Is not used in the treatment of portosystemic encephalopathy
C. Is not used to prevent travelers' diarrhea
D. Is used in ENT infections
E. Cannot be used short-term in irritable bowel syndrome

11. *Gentamicin:
A. Cannot be administered parenterally
B. Is ineffective against many organisms
C. Can be administered parenterally
D. Is a fluoroquinolone
E. Is a carbapenem

12. Risk groups for sepsis are:
    A. Patients undergoing surgery
    B. Newborns
    C. Iatrogenically immunosuppressed patients
    D. Elderly (>65 years)
    E. Pregnant women

13. The non-specific markers of inflammation and organ dysfunction are:
    A. Leukocytosis
    B. Elevated C-reactive protein
    C. Thrombocytopenia
    D. Increased creatinine
    E. Increased cholesterol

14. "Sepsis Six" includes:
    A. Adrenaline administration
    B. Blood culture collection
    C. Broad-spectrum antibiotic treatment is instituted
    D. Rapid fluid administration
    E. Oxygen administration

15. Decisions regarding antibiotic therapy after 72 hours include:
    A. Discontinuation of antibiotic treatment
    B. De-escalation of antibiotic therapy to oral treatment
    C. Treatment changing
    D. Continuation of intravenous therapy
    E. Eubiotic administration

16. The beta-lactam antibiotics include::
    A. Carbapenems
    B. Aminoglycosides
    C. Penicillins
    D. Cephalosporins
    E. Monobactams

17. The carbapenems include:
    A. Imipenem
    B. Meropenem
    C. Doripenem
    D. Ertapenem

E. Dlindapenem

18. The quinolones include:
    A. Ciprofloxacin
    B. Levofloxacin
    C. Moxifloxacin
    D. Amikacin
    E. Tobramycin

19. The aminoglycosides include:
    A. Teicoplanin
    B. Gentamicin
    C. Amikacin
    D. Tobramycin
    E. Vancomycin

20. The tetracyclines include:
    A. Doxycycline
    B. Minocycline
    C. Tetracycline
    D. Oxytetracycline
    E. Telithromycin

21. Macrolides include:
    A. Azithromycin
    B. Telithromycin
    C. Erythromycin
    D. Clarithromycin
    E. Vancomycin

22. The nitroimidazoles include:
    A. Nimorazole
    B. Tinidazole
    C. Metronidazole
    D. Sulphamethoxazole
    E. Cotrimoxazole

23. The most common sources of infection are:
    A. The digestive tract
    B. The urinary tract
    C. The biliary tract

D. The lower respiratory tract
E. The genital tract

24. Risk groups for sepsis are:
A. Patients with asplenism
B. Patients with autoimmune diseases
C. Patients with encephalitis
D. Cirrhotic patients
E. Patients on immunosuppressive treatment

25. The factors influencing the evolution of an infection towards sepsis are:
A. The virulence of the pathogenic agent
B. The microbial load
C. The site of the infection
D. Host's response
E. Comorbidities are not important in the progression of an infection to sepsis

26. The antibiotics that can be administered in a single daily dose are:
A. Ceftriaxone
B. Meropenem
C. Ertapenem
D. Amikacin
E. Teicoplanin

27. Immediate hypersensitivity reactions including anaphylaxis are characterized by:
A. Repeated cough
B. Facial edema
C. Eruption
D. Severe dyspnea
E. Headache

28. In severe penicillin allergies, the following should be avoided:
A. Fluorochinolons
B. Monobactams
C. Aminoglycosides
D. Cephalosporins
E. Carbapenems

29. The oxazolidinones include:

A. Vancomycin
B. Tigecycline
C. Daptomycin
D. Linezolid
E. Tedizolid

30. Risk groups for sepsis are:
A. Patients with a history of sepsis
B. Patients with meningitis
C. Patients with permanent medical devices
D. Alcohol addicts
E. HIV patients

31. "Sepsis Six" includes:
A. The lactate level is measured
B. Blood culture collection
C. Eubiotic administration
D. Rapid fluid administration
E. Diuresis and oral water balance are monitored

32. Sepsis represents a medical emergency; empirical antibiotic therapy must be:
A. Initiated within one hour of presentation
B. Initiated within four hours of presentation
C. Reviewed at 72 hours when antibiotic susceptibility results become available
D. Reviewed at 24 hours when antibiotic susceptibility results become available
E. Delayed 24 hours after presentation

33. Parameters to evaluate when choosing the initial antibiotic regimen include:
A. Family medical history
B. Route of administration
C. Duration of treatment
D. Monitoring for potential toxicity
E. Dose adjustment in hepatic/renal insufficiency

34. Groups at increased risk of developing sepsis include:
A. Elderly (>65 years) and very young patients (newborns)
B. Patients with medical conditions causing immunosuppression (HIV, asplenia, cirrhosis, autoimmune diseases)
C. Iatrogenically immunosuppressed patients (patients on immunosuppressive therapy, including systemic corticosteroids)

D. Patients with permanent medical devices, especially if they breach normal barriers against infection
E. Pregnant women do not represent a risk group

35. Healthcare-associated sepsis, a subgroup of community-acquired sepsis, is defined as sepsis occurring in:
A. Patients discharged within the last 30 days
B. Patients in chronic care facilities but not those residing in closed communities
C. Patients receiving outpatient medical treatment (e.g., dialysis patients)
D. Hospitalized patients
E. Patients who have had no contact with the healthcare system

36. Clinically, patients with septic shock require:
A. Vasopressor support to maintain a mean arterial pressure of at least 65 mmHg or higher
B. Elevated serum lactate concentration (>2 mmol/L) despite adequate fluid resuscitation
C. Vasopressor support to maintain a mean arterial pressure of at most 15 mmHg
D. Low serum lactate concentration (<1 mmol/L) despite adequate fluid resuscitation
E. Arterial hypertension

37. The qSOFA score for a patient is considered positive if at least two of the following criteria are met:
A. Glasgow Coma Scale <15
B. Glasgow Coma Scale <6
C. Respiratory rate ≥22 breaths/min
D. Systolic blood pressure ≤100 mmHg
E. Systolic blood pressure >150 mmHg

38. The SOFA (Sequential Organ Failure Assessment) score calculation also includes the following parameters:
A. Respiratory
B. Coagulation
C. Hepatic
D. Cardiovascular
E. Neuroendocrine system

39. Microorganisms causing nosocomial infections are:
A. Less virulent but often multidrug-resistant
B. Less virulent but rarely multidrug-resistant
C. Easier to treat
D. More difficult to treat

E. Extremely virulent

40. Community-acquired infections:
    A. Tend to be severe
    B. Tend to be mild
    C. Are often caused by virulent microorganisms, but generally sensitive to antibiotics
    D. Are often caused by virulent microorganisms, but generally multidrug-resistant
    E. Do not require antibiotic treatment

41. While culture-based methods remain the gold standard, their disadvantages include:
    A. Delay in obtaining results (typically around 24 hours for positivity and 48 hours for bacterial identification)
    B. Delay in obtaining results (typically around 72 hours for positivity and an additional 72 hours for bacterial identification)
    C. Cultures can be negative if antibiotics were administered before sampling
    D. Cultures can be negative if antibiotics were administered after sampling
    E. Cultures can be negative if anti-inflammatory medications were administered before sampling

42. At 72 hours, when most cultures become available, one of the following decisions must be made:
    A. Stop antibiotic treatment
    B. De-escalate antibiotic therapy to oral treatment
    C. Change the treatment
    D. Continue intravenous treatment
    E. Discharge the patient without antibiotic treatment

43. Antibiotic prophylaxis is not recommended for endocarditis prevention in patients undergoing procedures involving the:
    A. Upper respiratory tract
    B. Genitourinary tract
    C. Lower respiratory tract (including ENT and bronchoscopy procedures)
    D. Nervous system
    E. Muscular system

44. The cephalosporin category includes:
    A. Ertapenem
    B. Meropenem
    C. Oral cefuroxime
    D. Cefotaxime
    E. Ciprofloxacin

45. The glycopeptide and lipoglycopeptide category includes:
    A. Azithromycin
    B. Erythromycin
    C. Doxycycline
    D. Teicoplanin
    E. Vancomycin

46. Cephalosporins:
    A. Are superior to penicillin
    B. Have activity against many Gram-negative and Gram-positive bacteria except enterococci and anaerobic Gram-negative bacteria
    C. Do not have toxicity similar to penicillin
    D. Are inferior to penicillin
    E. Ceftaroline and ceftobiprole are active against MRSA

47. Carbapenems:
    A. Have the narrowest antibiotic spectrum
    B. Have the broadest antibiotic spectrum
    C. Differ in dosing and frequency of administration
    D. Are active only against Gram-negative bacteria
    E. Have no adverse effects

48. Macrolides:
    A. Inhibit protein synthesis by disrupting ribosomal function
    B. Erythromycin can be used in patients allergic to penicillin
    C. Can be administered orally or parenterally
    D. Diarrhea, vomiting, and abdominal pain are the main adverse effects of erythromycin
    E. QT interval prolongation is not a known cardiac effect of macrolides

49. Tetracyclines:
    A. Are bacteriostatic drugs containing four hydro-naphthacene nuclei
    B. Are bacteriostatic drugs containing three hydro-naphthacene nuclei
    C. Tigecycline is an injectable glycylcycline structurally related to tetracyclines
    D. Inhibit protein synthesis
    E. Exhibit neurotoxicity

50. Clindamycin:
    A. Is widely used
    B. Is not active against Gram-positive cocci
    C. Is active against anaerobes

D. Is used in osteomyelitis treatment
E. Is not widely used

51. Methicillin-resistant Staphylococcus aureus:
A. Intravenous vancomycin has been the first-line treatment for decades
B. Optimal therapeutic efficacy requires levels of 15–20 mg/L
C. An alternative to intravenous vancomycin treatment is linezolid
D. Empirical treatment includes only clindamycin
E. Empirical treatment includes only cephalosporins.

ANSWERS CHAP. IX – INFECȚIOUS DISEASES

1	D
2	B
3	C
4	B
5	D
6	B
7	A
8	B
9	D
10	A
11	C
12	B, C, D, E
13	A, B, C, D
14	B, C, D, E
15	A, B, C, D
16	A, C, D, E
17	A, B, C, D
18	A, B, C
19	B, C, D
20	A, B, C, D
21	A, B, C, D
22	A, B, C
23	B, C, D
24	A, B, D, E
25	A, B, C, D
26	A, C, D, E
27	B, C, D
28	D, E
29	D, E
30	A, C, D, E
31	A, B, D, E
32	A, C
33	B, C, D, E
34	A, B, C, D
35	A, B, C
36	A, B
37	A, C, D
38	A, B, C, D
39	A, D
40	A, C
41	A, C
42	A, B, C, D
43	A, B, C
44	C, D
45	D, E
46	A, B
47	B, C
48	A, B, C, D
49	A, C, D
50	C, D, E
51	A, B, C

CHAP. X - DERMATOLOGY

1. * Hypersensitivity reactions of the skin:
   A. Type I hypersensitivity reaction is caused by lymphocyte activity
   B. Type IV hypersensitivity reaction is caused by mast cell degranulation
   C. Type IV hypersensitivity reaction occurs at the first contact with the allergen
   D. The skin manifestation of type IV hypersensitivity reaction resembles measles
   E. Type I hypersensitivity reaction occurs shortly after exposure to the allergen and lasts for a few days

2. * Rash in hypersensitivity reactions of the skin:
   A. Has a well-defined shape when the cause is external
   B. Has a well-defined shape when the cause is internal
   C. Has a poorly defined, diffuse distribution when the cause is external
   D. Common causes of allergic contact dermatitis include acacia
   E. In contact dermatitis, the erythematous rash has a circinate distribution

3. * Toxic epidermal necrolysis (toxic necrotic epidermolysis):
   A. The mildest form of hypersensitivity reaction
   B. Lesions cover <30% of body surface
   C. Detachment is superficial, limited to the extremities
   D. Starts as a generalized erythematous rash that progresses to widespread skin detachment and erosion formation
   E. Laboratory tests show decreased mast cells, hemoglobin, and hematocrit

4. * Which of the following is not considered a malignant skin tumor:
   A. Actinic keratosis
   B. Squamous cell carcinoma
   C. Basal cell carcinoma
   D. Melanoma
   E. All of the above answers are correct

5. * Cells from which basal cell carcinoma develops are:
   A. Squamous epidermal cells
   B. Basal epidermal cells
   C. Granular epidermal cells
   D. Corneocytes epidermal cells
   E. E. Junctional epidermal cells

6. * Hypersensitivity reactions of the skin:
   A. Type I hypersensitivity reaction is caused by lymphocyte activity

B. Type IV hypersensitivity reaction is caused by mast cell degranulation
C. Type IV hypersensitivity reaction occurs at the first contact with the allergen
D. The skin manifestation of type IV hypersensitivity reaction resembles measles
E. Type I hypersensitivity reaction occurs shortly after exposure to the allergen and lasts for a few days

7. * Rash in hypersensitivity reactions of the skin:
A. Has a well-defined shape when the cause is external
B. Has a well-defined shape when the cause is internal
C. Has a poorly defined, diffuse distribution when the cause is external
D. Common causes of allergic contact dermatitis include acacia
E. In contact dermatitis, the erythematous rash has a circinate distribution

8. * Toxic epidermal necrolysis (toxic necrotic epidermolysis):
A. The mildest form of hypersensitivity reaction
B. Lesions cover <30% of body surface
C. Detachment is superficial, limited to the extremities
D. Starts as a generalized erythematous rash that progresses to widespread skin detachment and erosion formation
E. Laboratory tests show decreased mast cells, hemoglobin, and hematocrit

9. * Pemphigus vulgaris is an autoimmune disease characterized by the presence of antibodies against:
A. Hypodermis
B. Reticular dermis
C. Papillary dermis
D. Basement membrane
E. Epidermis

10. Bullous pemphigoid can be treated with:
A. NSAIDs
B. Bone marrow irradiation
C. Corticosteroids
D. Cyclophosphamide
E. Azathioprine

11. Risk factors for developing acquired cutaneous porphyria:
A. Intravenous drug abuse
B. Alcoholism
C. Smoking
D. Iron overload

E. Estrogen treatment

12. Clinical signs of acquired cutaneous porphyria:
    A. Lesions in the inguinal and intergluteal areas
    B. Generalized hypertrichosis
    C. Post-lesional scars
    D. Facial lesions
    E. Hyperpigmented skin

13. Paraclinical findings in acquired cutaneous porphyria:
    A. Altered renal tests
    B. Altered liver tests
    C. Increased plasma porphyrins
    D. Decreased urinary porphyrins
    E. Increased urinary porphyrins

14. Identify conditions characterized by blister formation:
    A. Bullous psoriasis
    B. B. Pemphigus vulgaris
    C. C. Bullous pemphigoid
    D. D. Stevens-Johnson syndrome
    E. E. Seborrheic dermatitis

15. In the treatment of acquired cutaneous porphyria, it is recommended to avoid:
    A. Salt
    B. Sugar
    C. Sun exposure
    D. Tobacco
    E. Estrogens

16. Treatment of acquired cutaneous porphyria:
    A. Corticosteroids
    B. NSAIDs
    C. Hydroxychloroquine
    D. Photoprotection
    E. Phlebotomy

17. Which of the following are considered types of cutaneous melanoma?
    A. Nodular
    B. Superficial spreading
    C. Deep spreading

D. Lentigo maligna
E. Acral lentiginous

18. Which statements about basal cell carcinoma are true?
A. The most common risk factor for this cancer is sun exposure
B. Clinically appears as a pearly papule with fine surface vascularization and central ulceration
C. Recommended treatment includes topical 5-fluorouracil or imiquimod, cryotherapy
D. Recommended treatment includes surgical excision, Mohs surgery, radiotherapy, or cryotherapy
E. Frequently metastasizes

19. Which of the following statements about actinic keratosis are false?
A. It is a rough, erythematous-scaly papule located on sun-exposed areas
B. During progression, the lesions may bleed, ulcerate, or become painful
C. Biopsy shows dysplastic epithelium
D. Biopsy shows anaplastic epidermal cells extending deeply into the dermis
E. The risk of progression to squamous cell carcinoma is 0.1% per year

20. Which of the following are risk factors for the development of melanoma?
A. Sun exposure
B. Large number of nevi
C. Family history of melanoma
D. Dark skin complexion
E. Fair skin complexion

21. Which of the following statements are true regarding superficial spreading melanoma?
A. It is one of the rare types of melanoma
B. It is the most common type of melanoma
C. It initially spreads superficially before invading deeper layers
D. It affects the palms and soles
E. It grows only vertically

22. What is the recommended treatment for patients with melanoma?
A. Surgical excision with 0.5 cm safety margins if in situ
B. Surgical excision with 1 cm safety margins if <2 mm thickness, possibly lymph node dissection
C. Surgical excision with 1.5 cm safety margins if <2 mm thickness
D. Surgical excision with 2 cm safety margins if >2 mm thickness
E. Chemotherapy and radiotherapy if metastases are present

23. Which of the following statements regarding squamous cell carcinoma are true?
A. The main implicated risk factors include sun exposure, actinic keratoses, fair skin, chronic wounds, and scars
B. Biopsy reveals anaplastic epidermal cells extending deeply into the dermis
C. Treatment consists of surgical excision; Mohs micrographic surgery is especially recommended for lesions located on the face; radiotherapy may be useful in large tumors
D. First-line treatment consists of topical 5-fluorouracil, imiquimod, or cryotherapy
E. The tumor evolves slowly but may reach large dimensions by the time of diagnosis if located in poorly visible areas (e.g., back, scalp)

24. Treatment of hypersensitivity skin reactions includes:
A. Removal of the triggering agent or discontinuation of contact with the allergen
B. Mild cases can be treated with topical corticosteroids and antihistamines
C. Mild cases can be treated with oral corticosteroids
D. Oral corticosteroids may be required at the onset of lesions
E. Epinephrine is indicated in severe cases involving airway angioedema and/or anaphylaxis

25. Erythema multiforme:
A. Is a cutaneous hypersensitivity reaction
B. Is caused by ingestion of caustic substances
C. Lesions have a “target-like” appearance
D. Is associated with general malaise and myalgia
E. Lesions may present as macules, plaques, or vesicles.

26. Stevens-Johnson syndrome:
A. Severe form of erythema multiforme
B. Involves plaques affecting more than 30% of body surface area
C. Patients are at increased risk of dehydration
D. Nikolsky sign is negative
E. Treatment involves discontinuation of the triggering agent

27. Seborrheic dermatitis:
A. Is a chronic hyperproliferative condition of the dermis
B. Is most commonly located on the posterior thorax or face
C. Symptoms include pruritus, erythematous plaques with yellow, greasy scales
D. Treatment includes emollients for newborns, and shampoos containing selenium or ketoconazole
E. "Cradle cap" is the popular term for seborrheic dermatitis located on the face of newborns

28. Cutaneous lesions in psoriasis:
A. Are well-demarcated erythematous plaques
B. Present with silvery scales on flexural areas
C. Bleed easily when scales are removed (Auspitz sign)
D. May be associated with pustules and vesicles
E. Nail involvement includes pitting of the nail plates.

29. Treatment of psoriasis includes:
A. Emollients
B. Topical corticosteroids
C. Phototherapy
D. Cyclosporine in mild forms
E. Methotrexate

30. Erythema nodosum:
A. Inflammation of the dermis and subcutaneous fat resulting in erythematous, painful nodules
B. Most commonly located on the anterior thighs
C. Caused by a delayed-type immune reaction to infections, connective tissue autoimmune diseases, inflammatory bowel diseases, or medications
D. Erythematous nodules are not painful on palpation
E. Skin biopsy may reveal fibrosis in the subcutaneous fat (panniculitis)

31. Identify the correct statements regarding cradle cap ("milk crust"):
A. It refers to seborrheic dermatitis
B. It appears in adolescents
C. It occurs in newborns
D. It is associated with psoriatic arthritis
E. It occurs in pityriasis.

32. Common causes of contact dermatitis:
A. Celery and carrots
B. Nickel
C. Soap
D. Latex
E. Cement

33. The varicella-zoster virus is the etiologic agent in:
A. Common warts

B. Condyloma
C. Chickenpox
D. Orf
E. Herpes zoster (shingles)

34. Factors that worsen acne:
A. Use of diuretics
B. Use of corticosteroids
C. Use of antiarrhythmics
D. Excess thyroid hormones
E. Excess androgens

35. *The highest prevalence of STIs is found:
A. Among middle-aged patients
B. Among heterosexual individuals
C. Among young populations
D. Among individuals with stable partners
E. Among individuals who regularly use condoms

36. *Laboratory tests required for microbiological examination:
A. Endocervical samples are collected by inserting the sampling device a few centimeters into the cervix
B. Endocervical samples are collected after removing excess mucus
C. The endocervical sampling device is inserted using back-and-forth movements
D. Endocervical samples are collected by rotating the device for 1–5 seconds
E. Vaginal samples are obtained by rotating the sampling device for 10–15 seconds at the anterior vaginal fornix

37. *The minimum investigation panel for an asymptomatic individual includes testing for infection with:
A. Chlamydia trachomatis
B. Candida albicans
C. Trichomonas vaginalis
D. Lactobacillus (Döderlein flora)
E. Escherichia coli.

38. *The main complication associated with Chlamydia trachomatis infection is:
A. Bacterial vaginosis

B. Uveitis
C. Pelvic inflammatory disease (which may lead to tubal infertility)
D. Urethritis
E. Proctocolitis (with loose stools and massive bleeding)

39. *The highest prevalence of STIs is found:
A. Among middle-aged patients
B. Among heterosexual individuals
C. Among young populations
D. Among individuals with stable partners
E. Among individuals who regularly use condoms

40. *Laboratory tests required for microbiological examination:
A. Endocervical samples are collected by inserting the sampling device a few centimeters into the cervix
B. Endocervical samples are collected after removal of excess mucus
C. The endocervical sampling device is introduced with back-and-forth movements
D. Endocervical samples are collected by rotating the device for 1–5 seconds
E. Vaginal samples are obtained by rotating the sampling device for 10–15 seconds in the anterior vaginal fornix.

41. *The minimum investigation panel for an asymptomatic individual includes testing for infection with:
A. Chlamydia trachomatis
B. Candida albicans
C. Trichomonas vaginalis
D. Lactobacillus (Döderlein flora)
E. Escherichia coli

42. *The main complication associated with Chlamydia trachomatis infection is:
A. Bacterial vaginosis
B. Uveitis
C. Pelvic inflammatory disease (which may lead to tubal infertility)
D. Urethritis
E. Proctocolitis (with loose stools and massive bleeding).

43. *Chancroid has an incubation period of:
A. 1–4 days

B. 4–7 days
C. 7–10 days
D. 10–14 days
E. 14–21 days

44. *Lymphogranuloma venereum is an STI caused by invasive serotypes of:
A. Trichomonas vaginalis
B. Chlamydia trachomatis
C. Candida albicans
D. Lactobacillus Doderlein
E. Escherichia coli

45. *Treatment of primary genital herpes infection:
A. Acyclovir 400 mg three times a day for 14 days
B. Valacyclovir 500 mg twice a day for 7 days
C. Famciclovir 250 mg three times a day for 5 days
D. Valacyclovir 500 mg twice a day for 10 days
E. Famciclovir 250 mg three times a day for 7 days

46. * Condyloma acuminata has a long incubation period, with an average duration of:
A. 1 month
B. 2 months
C. 3 months
D. 4 months
E. 5 months

47. *Neisseria gonorrhoeae can be treated with a single dose of:
A. Moldamin 1,200,000 IU i.m.
B. Cefepime 1 g i.m.
C. Ceftriaxone 1 g i.m.
D. Imipenem 500 mg i.m.
E. Meropenem 250 mg i.m.

48. *Infection with Neisseria gonorrhoeae is often associated with:
A. Trichomonas vaginalis
B. Chlamydia trachomatis
C. Candida albicans
D. Lactobacillus Doderlein
E. Escherichia coli

49. *A genital ulceration can occur in:
A. Primary and secondary syphilis
B. Secondary and tertiary syphilis
C. Primary and tertiary syphilis
D. Secondary syphilis and early congenital syphilis
E. None of the above is correct

50. *Which of the following is NOT a cause of genital nodular lesions:
A. Human papillomavirus
B. Molluscum contagiosum
C. Sarcoptes scabiei
D. Treponema pallidum
E. Phthirus pubis

51. The clinical picture of infection with Chlamydia trachomatis includes:
A. In men: anterior urethritis, dysuria, epididymo-orchitis
B. In men: pain in the right flank
C. In women: increased leucorrhea, dysuria
D. In women: intermenstrual or postcoital bleeding and lower abdominal pain
E. High fever (39–40°C) in both women and men

52. Identify the causes of genital pruritus:
A. Neisseria gonorrhoeae
B. Chlamydia trachomatis
C. Candida albicans
D. Trichomonas vaginalis
E. Phthirus pubis (pubic lice)

53. Identify non-infectious causes of genital pruritus:
A. Chronic renal failure
B. Irritative contact dermatitis
C. Genital eczema
D. Lichen sclerosus
E. Lichen planus

54. Laboratory investigations that may be recommended in the case of genital pruritus:
A. Direct microscopic examination of vaginal secretions for the diagnosis of candidiasis and Trichomonas vaginalisinfection
B. Biopsy for the diagnosis of inverse psoriasis
C. Nucleic acid amplification tests (NAATs)

D. Culture for Trichomonas vaginalis infection
E. Serology for syphilis and HIV infection

55. Trichomoniasis:
A. Is caused by Trichomonas vaginalis
B. In women, the most common manifestations are abundant, purulent, foul-smelling vaginal discharge
C. In men, most cases are asymptomatic, though some may have urethral discharge, irritation, and dysuria
D. Culture of secretions is the investigation of choice for diagnosing Trichomonas vaginalis infection
E. The treatment of choice is metronidazole 400 mg twice a day for 7 days

56. Treponema pallidum:
A. Is a non-motile spirochete
B. Infection occurs through direct contact with an infectious lesion
C. Grows in cultures on regular media
D. Can be identified in dark-field microscopy from secretions taken from chancres or condyloma lata
E. Most laboratories use a treponemal immunoenzymatic test to detect IgG and IgM as screening tests

57. Treponemal tests:
A. Remain positive for life
B. Are not very specific for treponemal disease
C. Include the TPHA test (T. pallidum hemagglutination assay)
D. Include the TPPA test (T. pallidum particle agglutination assay)
E. Differentiate between a treated infection and reinfection

58. The clinical picture of primary syphilis includes:
A. A painless firm ulcer
B. Painful regional lymphadenopathy
C. Symptoms appear between 9 and 90 days after exposure
D. Lesions heal spontaneously within 8–10 weeks
E. Healing occurs after treatment within 2–6 weeks

59. Secondary syphilis:
A. Occurs in 75% of untreated primary syphilis cases
B. Appears 6–10 weeks after contact with the spirochete
C. Appears 6–10 weeks after the development of the primary lesion
D. Any organ can be affected (hepatitis, nephritis, arthritis, meningitis, uveitis, interstitial

keratitis, and retinal involvement)
E. Common signs include widespread rash, generalized lymphadenopathy, condyloma lata, oral and genital lesions

60. Treatment of syphilis includes:
A. Early syphilis – Benzathine penicillin G 2.4 MU i.m., single dose
B. Early syphilis – Doxycycline 100 mg twice daily for 14 days (in case of penicillin allergy)
C. Late latent syphilis – Benzathine penicillin G 2.4 MU i.m., three doses at one-week intervals
D. Late latent syphilis – Doxycycline 100 mg twice daily for 28 days
E. During pregnancy – Doxycycline 100 mg twice daily for 28 days

61. Chancroid:
A. Is caused by Treponema pallidum
B. Is caused by Haemophilus ducreyi
C. Clinical picture includes painful ulcers that bleed easily
D. Clinical picture includes painful inguinal lymphadenopathy that may evolve into abscesses that suppurate
E. The treatment of choice is Benzathine penicillin G 2.4 MU i.m., single dose

62. Vertical transmission of HIV infection:
A. Is the most frequent mode of transmission in adults
B. Occurs via vaginal or anal sexual contact
C. Transmission can occur in utero
D. Most infections occur perinatally
E. Breastfeeding doubled the risk of vertical HIV transmission before the antiretroviral era

63. Symptomatic HIV infection:
A. As HIV infection progresses, viral load increases
B. CD4 lymphocyte count increases
C. As viral load decreases, CD4 lymphocytes decrease and the patient develops symptoms
D. The clinical picture is caused by the direct effect of HIV
E. The clinical picture is caused by the HIV-associated immunocompetent system

64. Questions that help differentiate the causes of genital nodular formations:
A. Where are the nodular lesions located? Are the lesions single or multiple?
B. Are they pruritic or painful?
C. How long have they been present?
D. What medications have you taken in the last month?
E. Are there other nodules or eruptions in other areas of the skin?

65. Treatment of Molluscum contagiosum infection during pregnancy:
A. Cryotherapy
B. Podophyllotoxin cream
C. Imiquimod cream
D. Discouraging pubic hair removal
E. Notification of sexual partners

66. Regarding primary herpes simplex virus (HSV) infection during pregnancy:
A. It has the highest risk of transmission to the fetus in the first trimester.
B. If it occurs during the first trimester, abortion is recommended.
C. If it occurs during the last trimester, cesarean delivery is recommended.
D. Mothers who develop the disease in the last trimester will continue therapy with Acyclovir until birth.
E. If the infection appears in the second trimester, antiviral therapy eliminates the need for cesarean section.

67. Common signs of secondary syphilis:
A. Widespread skin rash (present in 25% of cases), possibly affecting the whole body, including palms and soles – typically a copper-colored, non-itchy maculopapular rash.
B. Generalized lymphadenopathy (present in 50% of cases).
C. Condyloma lata – moist, wart-like plaques in the perianal area and other high-humidity anatomical regions.
D. Widespread skin rash (present in 75% of cases), possibly affecting the whole body, including palms and soles – typically a copper-colored, non-itchy maculopapular rash.
E. Mucosal lesions in the oral cavity and genital organs in the form of individual or confluent mucous plaques, forming “snail track” ulcers.

68. Where is universal HIV testing recommended (services where all patients should be tested)?
A. Emergency Department for all patients under 40 years.
B. Detention centers.
C. Gynecology clinics.
D. Hospital administrative staff.
E. Services performing pregnancy terminations.

69. Hematological complications of HIV infection:
A. Lymphocytosis progresses with an increase in CD4 lymphocytes.
B. Anemia in HIV infection is usually mild, normochromic, normocytic.
C. Neutropenia is common and usually mild.
D. Isolated thrombocytosis may appear early in HIV infection and may be the only manifestation for some time. Platelet counts are usually moderately elevated but can rise dramatically to 50-80 x 10^9/L, causing spontaneous thrombosis and arterial occlusion.

E. Pancytopenia is caused by underlying opportunistic infections, particularly *Mycobacterium avium-intracellulare* (MAI) and disseminated cytomegalovirus infection or neoplasms (lymphomas).

70. Renal complications of HIV infection:
A. HIV-associated nephropathy.
B. Hypertension secondary to nephrotoxicity.
C. IgA nephropathy.
D. Thrombotic microangiopathy (TMA).
E. Drug toxicity from treatments.

71. Regarding HIV infection in pregnancy:
A. The general transmission rate from mother to fetus is approximately 10%.
B. Treatment can reduce the transmission rate to 1%.
C. Breastfeeding is actively encouraged if the mother is on ARV therapy.
D. Cesarean section reduces the risk of transmission.
E. The newborn must receive treatment with Zidovudine syrup.

72. Post-exposure prophylaxis in HIV:
A. Medical personnel exposed to HIV must receive prophylaxis within 24 hours.
B. Prophylaxis is not recommended if the HIV-positive patient is treated and has an undetectable viral load (<200 copies HIV RNA/mL).
C. Post-exposure prophylaxis is done with standard monotherapy.
D. Post-exposure prophylaxis is administered for 4 weeks.
E. The risks of prophylactic treatment are negligible.

73. Specific fungal infections associated with HIV infection:
A. Amanitiasis.
B. Cryptococcosis.
C. Histoplasmosis.
D. Sporotrichosis.
E. *Pneumocystis jirovecii* infection.

74. Kaposi's sarcoma in people with HIV infection:
A. It manifests more aggressively than in uninfected individuals.
B. ARV therapy does not influence the appearance of Kaposi's sarcoma, possibly due to particular sensitivity to HHV infection.
C. Human herpesvirus 8 (HHV-8) is involved in the pathogenesis of Kaposi's sarcoma.
D. It can appear in the eyes.
E. It can occur at the visceral level.

75. Nucleoside/nucleotide reverse transcriptase inhibitors (NRTIs) used in HIV treatment:
A. Elvitegravir.
B. Tenofovir.
C. Abacavir.
D. Lamivudine.
E. Maraviroc.

76. Non-nucleoside reverse transcriptase inhibitors (NNRTIs) used in HIV treatment:
A. Enfuvirtide.
B. Efavirenz.
C. Etravirine.
D. Elvitegravir.
E. Emtricitabine.

77. Integrase inhibitors (INSTIs) used in HIV treatment:
A. Rilpivirine.
B. Raltegravir.
C. Darunavir.
D. Dolutegravir.
E. Maraviroc.

78. Relevant signs and symptoms for the diagnosis of acute HIV infection:
A. Fever.
B. Cough.
C. Myalgia.
D. Marked fatigue.
E. Diarrhea.

79. Relevant signs and symptoms for the diagnosis of sexually transmitted infections (STIs):
A. Fever.
B. Urethral discharge.
C. Vaginal discharge.
D. Inguinal lymphadenopathy.
E. Rectal symptoms.

80. The top three most common STIs worldwide in England in 2018 were:
A. Gonorrhea.
B. Chlamydia.
C. Genital herpes.
D. Genital warts.
E. HIV.

81. Treatment of non-gonococcal urethritis:
A. Administer Moldamin 2,400,000 IU intramuscularly.
B. Administer Doxycycline 100 mg orally twice daily for 7 days.
C. Sexual abstinence until a negative test.
D. Testing all sexual partners is recommended.
E. Medical follow-up after treatment is indicated in case of *Chlamydia trachomatis* infection.

82. Treatment of recurrent non-gonococcal urethritis:
A. Azithromycin 1 g on the first day, followed by 500 mg once daily for 2 days.
B. Ciprofloxacin 2 g intramuscularly, single dose.
C. Ceftriaxone 2 g intramuscularly, single dose.
D. Metronidazole 400 mg twice daily for 5–7 days.
E. Moxifloxacin can be administered if Azithromycin was ineffective.

83. *N. gonorrhoeae* can infect:
A. Urethra.
B. Cervix.
C. Conjunctiva.
D. Sinuses.
E. Rectum.

84. Treatment of uncomplicated *Chlamydia trachomatis* infection:
A. Ceftriaxone 1 g intramuscularly, single dose.
B. Azithromycin 1 g, single dose.
C. Azithromycin 1 g followed by 500 mg for 2 days.
D. Doxycycline 100 mg twice daily for 10 days.
E. Doxycycline 100 mg twice daily for 7 days.

85. Pelvic inflammatory disease can be caused by:
A. Mycoplasma genitalium.
B. Chlamydia trachomatis.
C. Treponema pallidum.
D. HIV.
E. Neisseria gonorrhoeae.

ANSWERS CHAP. X – DERMATOLOGY

1	D	40	B	79	B, C, D, E
2	A	41	A	80	A, B, D
3	D	42	C	81	B, D, E
4	A	43	B	82	A, D, E
5	B	44	B	83	A, B, C, E
6	D	45	C	84	C, E
7	A	46	C	85	A, B, E
8	D	47	C		
9	E	48	B		
10	C, E	49	C		
11	B, C, D, E	50	E		
12	C, D, E	51	A, C, D		
13	B, C, E	52	C, D, E		
14	B, C, D	53	B, C, D, E		
15	C, D, E	54	A, C, D, E		
16	C, D, E	55	A, B, C, E		
17	A, B, D, E	56	B, D, E		
18	A, B, D	57	A, C, D		
19	B, C, E	58	A, C,		
20	A, B, C, E	59	C, D, E		
21	B, C	60	A, B, C, D		
22	A, B, D, E	61	B, C, D		
23	A, B, C, E	62	C, D, E		
24	A, B, E	63	A, D		
25	A, C, D, E	64	A, B, C, E		
26	A, C, E	65	A, D		
27	C, D	66	C, D, E		
28	A, E	67	B, C, D, E		
29	A, B, C, E	68	B, C, E		
30	A, C	69	B, C, E		
31	A, C	70	A, C, D, E		
32	B, C, D	71	D, E		
33	C, E	72	B, D		
34	B, E	73	B, C, E		
35	C	74	A, C, D, E		
36	B	75	B, C, D		
37	A	76	B, C		
38	C	77	B, D		
39	C	78	A, C, D		

CHAP. XI - PSYCHIATRY

1 *Which of the following symptoms of schizophrenia is associated with a poorer prognosis?
A. Delusions
B. Hallucinations
C. Negative symptoms
D. Catatonic behavior
E. Disorganized thinking

2 *Which of the following antidepressants belongs to the class of selective serotonin reuptake inhibitors (SSRIs)?
A. Escitalopram
B. Trazodone
C. Amitriptyline
D. Mirtazapine
E. Bupropion

3 *Which of the following symptoms occurs during a manic episode?
A. Anorexia
B. Decreased need for sleep
C. Thought blocking
D. Affective flattening
E. Difficulty making decisions

4 *Panic disorder is characterized by:
A. Recurrent panic attacks triggered by specific stressful life events
B. Recurrent panic attacks in social situations involving evaluation by others
C. Recurrent panic attacks related to fear of gaining weight
D. Recurrent unexpected panic attacks
E. Recurrent panic attacks triggered by traumatic memories

5 *Which of the following traits best characterizes individuals with antisocial personality disorder?
A. Inability to form close relationships
B. Persistent distrust and suspicion of others
C. Aggressive behavior toward people and animals
D. Tendency to view others as either entirely good or entirely bad

E. Social withdrawal

6 *Which of the following signs indicates marijuana intoxication?
A. Injected conjunctivae
B. Respiratory depression
C. Mydriasis
D. Insomnia
E. Nystagmus

7 *Which of the following substances can be administered to counteract benzodiazepine overdose?
A. Bromocriptine
B. Cyproheptadine
C. Physostigmine
D. Naloxone
E. Flumazenil

8 Which of the following symptoms is part of the diagnostic criteria for schizophrenia?
A. Delusions and hallucinations
B. Disorganization of thought, speech, and behavior
C. Negative symptoms
D. Depression
E. Compulsive behavior

9 Which of the following statements about delusional disorder are true?
A. Delusional disorder is clinically characterized by one or more delusions
B. The duration of symptoms does not exceed one month
C. The duration of symptoms exceeds one month
D. The presence of hallucinations is required for diagnosis
E. Delusional disorder is characterized by disorganized thought and speech

10 Which of the following symptoms must be present for at least 2 weeks to diagnose major depression?
A. Depressed mood or anhedonia
B. Changes in sleep and appetite
C. Feelings of guilt and suicidal ideation
D. Affective flattening or apathy
E. Disorganized thought and speech

11 Which of the following symptoms are found in major depressive disorder with atypical features?

A. Hyperphagia
B. Hypersomnia
C. Lack of affective reactivity
D. Hallucinations and delusions
E. Mania

12 Which of the following statements about bipolar disorder are true?
A. Diagnosis requires at least one manic episode
B. Diagnosis requires at least one hypomanic episode and one major depressive episode
C. The patient may function normally between episodes
D. Manic episodes do not significantly impair functioning
E. Depressive episodes do not significantly impair functioning

13 Which of the following statements about high-potency antipsychotics are true?
A. Their antipsychotic effect is due to D2 dopamine receptor blockade
B. Common side effects include parkinsonism, hyperprolactinemia, and tardive dyskinesia
C. Their main side effects are anticholinergic
D. They are mainly used for emergency control of psychosis or agitation
E. They are used as first-line maintenance treatment for psychosis

14 Which of the following drug classes are indicated for the treatment of manic episodes in bipolar disorder?
A. Mood stabilizers
B. Atypical antipsychotics
C. Selective serotonin reuptake inhibitors (SSRIs)
D. Serotonin-norepinephrine reuptake inhibitors (SNRIs)
E. Monoamine oxidase inhibitors (MAOIs)

15 Which of the following statements about panic disorder are true?
A. Panic attacks are spontaneous
B. Panic attacks occur in specific situations
C. Panic attacks are accompanied by fear of recurrence
D. Maladaptive avoidance behaviors may develop
E. A single panic attack is sufficient for diagnosis

16 Which of the following therapeutic strategies are used in panic disorder?
A. Rapid-onset, short half-life benzodiazepines
B. Selective serotonin reuptake inhibitors (SSRIs)
C. Monoamine oxidase inhibitors (MAOIs)
D. Cognitive-behavioral therapy

E. Norepinephrine and dopamine reuptake inhibitors

17 Which of the following statements about generalized anxiety disorder are true?
A. Anxiety or worry is persistent and excessive
B. Symptoms persist for more than 6 months
C. Functioning is impaired
D. Anxiety or worry is related to perceived physical appearance flaws
E. Anxiety or worry is focused on having a serious illness despite no significant somatic symptoms

18 Which of the following statements about obsessions are true?
A. Obsessions are intrusive, persistent, and recurrent thoughts or impulses
B. Obsessions are repetitive behaviors or mental acts
C. Obsessions are accompanied by ego-dystonia
D. Obsessions are accompanied by ego-syntonia
E. Obsessions are false beliefs about oneself and others that persist despite evidence to the contrary

19 Which of the following symptoms suggest post-traumatic stress disorder (PTSD)?
A. Intrusive memories and recurrent distressing dreams of the traumatic event
B. Avoidance of trauma-related stimuli
C. Emotional detachment
D. Delusions
E. Hallucinations

20 Which categories of symptoms are found in somatic symptom disorder?
A. Pain symptoms
B. Sexual symptoms
C. Metabolic symptoms
D. Gastrointestinal symptoms
E. Endocrine symptoms

21 Which of the following clinical situations are complications of anorexia nervosa?
A. Electrolyte imbalances
B. Bulimia
C. Ventricular arrhythmias
D. Hallucinations in clear consciousness
E. Panic attacks

22 Which of the following statements about bulimia nervosa are true?
A. Increased caloric intake occurs over a short period of time

B. Increased caloric intake occurs over a long period of time
C. Compensatory behaviors include purging, caloric restriction, or excessive physical activity
D. The individual maintains a normal weight
E. The individual maintains a weight below normal

23 Which of the following personality traits are characteristic of paranoid personality disorder?
A. Distrust and suspicion toward others
B. Emotional lability
C. Inappropriate seductive and theatrical behavior
D. Misinterpretation of others' comments and actions
E. Aggression, destruction of property, and unlawful activities

24 Which of the following personality traits are characteristic of borderline personality disorder?
A. Affective and relational instability
B. Impulsivity
C. Perfectionism
D. Feelings of emptiness
E. Arrogance

25 Which of the following personality traits are characteristic of schizoid personality disorder?
A. Distrust and suspicion toward others
B. Social detachment
C. Inappropriate seductive and theatrical behavior
D. Need for support from others
E. Emotional coldness

26 Which of the following symptoms and signs occur during alcohol withdrawal?
A. Nausea, vomiting, sweating
B. Delusion, tactile hallucinations, anxiety, and tremors
C. Delirium, tactile hallucinations, anxiety, and tremors
D. Stomach cramps and myalgia
E. Depression, olfactory hallucinations, and tremors

27 Which of the following statements about amphetamine abuse are true?
A. Amphetamine intoxication is manifested by hyperactivity, mydriasis, tachycardia, and hypertension
B. Amphetamine intoxication is manifested by sedation, slurred speech, and impaired

coordination
C. Psychosis may occur in both acute intoxication and chronic use
D. Amphetamine withdrawal manifests as depression and increased appetite
E. Amphetamine withdrawal manifests as euphoria, grandiosity, and mydriasis

28 Which of the following statements about opioid abuse are true?
A. Opioid intoxication manifests as impulsivity and aggression
B. Opioid intoxication manifests as euphoria, miosis, and decreased alertness
C. Opioid withdrawal manifests as myalgia, vomiting, diarrhea, and anxiety
D. Opioid withdrawal manifests as constipation, miosis, and anxiety
E. Chronic opioid use may lead to psychosis.

ANSWERS CHAP. XI - PSYCHIATRY

1 C
2 A
3 B
4 D
5 C
6 A
7 E
8 A, B, C
9 A, C
10 A, B, C
11 A, B
12 A, B, C
13 A, B, D
14 A, B
15 A, C, D
16 A, B, D
17 A, B, C
18 A, C
19 A, B, C
20 A, B, D
21 A, C
22 A, C, D
23 A, D
24 A, B, D
25 B, E
26 A, C
27 A, C, D
28 B, C

CHAP. XII - SURGERY

1. *Which of the following statements is true?
   A. Stomach arterial blood supply is assigned by the superior mesenteric artery.
   B. Stomach arterial blood supply is assigned by left and right gastric arteries, gastroepiploic arteries (left and right), short gastric arteries and gastroduodenal arteries.
   C. Left and right gastric arteries binding together and form the superior mesenteric artery.
   D. Short gastric vessels provide blood supply for the lower gastric curve.
   E. All the above are true

2. Which of the following statements are true?
   A. Duodenum blood supply comes from the right gastroepiploic artery and the inferior mesenteric artery
   B. Duodenum blood supply comes from the right gastroepiploic artery and the superior mesenteric artery
   C. The duodenum is the part of the digestive tract contained between the stomach and jejunum, mostly located retroperitoneal, which has a 25-30 cm length.
   D. The duodenum is followed by the jejunum at the Treiz ligament level, situs where the small bowel becomes an extraperitoneal organ.
   E. From the anatomic point of view, the duodenum is divided into 3 parts.

3. Which of the following statements are true?
   A. Parasimpatic stomach nerves are represented by the vagus nerves
   B. The right vagus nerve sends a posterior branch to the coeliac plexus.
   C. The left vagus nerve sends a posterior branch to the coeliac plexus.
   D. The right vagus nerve sends a hepatic branch which crosses to the gastrohepatic ligament and reaches to the gallbladder, the biliary tract and the liver.
   E. Simpatic stomach nerves are represented by the vagus nerves

4. * Which of the following statements is true?
   A. Approximately 50% of gastric cancers are adenocarcinomas.
   B. Gastric adenocarcinoma risk factors include: H. *pylori* infection, pernicious anemia, achlorhydria, gastric adenomatous polyps and chronic gastritis.
   C. Polypoid gastric carcinomas are by far the most common.
   D. Linitis plastica is the term used in order to describe gastric cancers that superficially infiltrate portions of the gastric wall.
   E. All the above are true.

5. * Which of the following statements is true?
   A. Gastric cancers are symptomatic in early stages.

B. Specific symptoms for early stages gastric cancers includes: dysphagia, hematemesis, melena.

C. The palpation of an epigastric tumor mass indicates locally advanced neoplasia.

D. Upper digestive endoscopy is indicated only in young patients.

E. Endoscopic ultrasound is superior to upper digestive endoscopy in gastric cancer diagnosis.

6. Which of the following statements are true?
   A. Total gastrectomy is required for either extensive distal lesions or proximal tumors.
   B. Radical surgical resection for gastric adenocarcinoma treatment is performed in case of localized disease
   C. The Dukes oncology staging system is used for preoperative clinical staging
   D. Pre- and postoperative chemotherapy with or without radiotherapy as an adjuvant to surgery, has no demonstrated efficacy
   E. For distal lesions, the elective procedure is radical subtotal gastrectomy

7. Which of the following statements are true?
   A. Laparoscopy is useful in staging, if peritoneal metastasis occurs.
   B. Exploratory laparoscopy is useful only in early stages of gastric carcinoma.
   C. If laparoscopy is performed, the biopsy is not indicated, due to the risk of bleeding.
   D. Biopsy should be performed from any suspect lesion noted during laparoscopy.
   E. TMN grading system is used for gastric cancer staging.

8. Which of the following statements are true?
   A. The stomach represents the main situts for almost two thirds of gastro-intestinal tract lymphomas.
   B. Most common lymphoma type is Hodgin lymphoma.
   C. Endoscopy with tissue biopsy is used in order to establish lymphoma diagnosis.
   D. If the lesion is limited to the stomach, 5 years survival hence raises up to 100%.
   E. Specific symptoms for gastric lymphoma include upper abdomen pain, unexplained weight loss, fatigue and bleeding.

9. Which of the following statements with respect to gastrointestinal stromal tumours (GIST) are true?
   A. GIST are always malignant tumours
   B. The assessment usually involves upper GI endoscopy, which reveals a submucous tumoural mass.
   C. Abdominal CT can provide data regarding the tumour dimensions and extension, and can reveal metastasis, if any.
   D. Lymph node extension is always present.
   E. For malignant-type tumours, imatinib-mesylate chemotherapy was effective

10. * Which of the following statements is true?
    A. Zollinger-Ellison syndrome is the most known exocrine tumoral disease.
    B. Approximately 20% of all the gastrinoma are malignant
    C. The diagnosis is based on hypergastrinemia with gastric acid hypersecretion.
    D. Total gastrectomy with esophageal anastomosis is the elective treatment for malignant gastrinoma
    E. All the above.

11. Which of the following statements are true?
    A. Melena is always encountered in duodenal adenocarcinoma.
    B. For duodenal tumours located in the first or the second part of the duodenum, duodenopancreatectomy is required.
    C. The most frequent situs for the small bowel carcinoma is the duodenum.
    D. Approximately two thirds of these lesions are located in the first part of the duodenum.
    E. Upper GI endoscopy and biopsy are not indicated in duodenal malignant tumors.

12. Which of the following statements are true?
    A. Non-specific manifestations of the Zollinger-Ellison syndrome are similar with ulcer, involving chronic diarrhea or severe concomitant diarrhea.
    B. Gastrinomas may occur sporadically or as part of an inherited familial syndrome (MEN-1)
    C. Life expectancy in patients with malignant variant is over 80% at 5 years
    D. The most common metastasis in Zollinger-Ellison syndrome is to the lung
    E. Hyperparathyroidism is highly suggestive of the presence of concomitant MEN-1 syndrome

13. *Which of the following statements is true?
    A. Early dumping syndrome involves a series of symptoms that occur after ingestion of low-osmolarity foods
    B. Approximately 15 minutes after ingestion of the meal, the patient presents with anxiety, weakness, tachycardia, profuse sweating, and frequently palpitations
    C. Abdominal cramps are never present
    D. Constipation is frequently present
    E. None of the above is correct

14. * Which of the following statements is true?
    A. Avoiding liquid meals, changing the size of each meal, and eating some fat are effective measures in early dumping syndrome
    B. In late dumping syndrome, symptoms usually begin 1 hour after a meal

C. In late dumping syndrome, abdominal gurgling and diarrhea occur
D. Conservative treatment of this syndrome includes drinking fluids immediately after a meal
E. Surgical treatment is not indicated in late dumping syndrome

15. Which of the following statements are true?
A. Nearly half of patients who have undergone truncal vagotomy have altered bowel habits
B. Causes of postvagotomy diarrhea include accelerated intestinal motility, rapid gastric emptying, and biliary malabsorption
C. Fluid intake should be increased in patients with postvagotomy diarrhea
D. Afferent loop stenosis occurs after gastrectomy with Billroth I intestinal reconstruction
E. Symptoms of afferent loop stenosis typically include severe abdominal cramps unrelated to food intake

16. Which of the following statements are true?
A. Blind loop syndrome is more common after a Billroth II procedure
B. Blind loop syndrome is more common after a Billroth I procedure
C. Blind loop syndrome is associated with significant bacterial overgrowth in the excluded intestinal loop
D. Patients present with diarrhea, weight loss, weakness, and are often anemic
E. Treatment with broad-spectrum oral antibiotics prevents future recurrence of bacterial overgrowth

17. Which of the following statements are true?
A. Recurrent ulcer disease after surgery for benign BUP is most commonly caused by a complete vagotomy
B. Patients may present with abdominal pain during eating, as well as nausea and vomiting
C. Gastrin levels are useful in ruling out the presence of a gastrinoma
D. Truncal vagotomy with antrectomy has one of the highest recurrence rates
E. Traditionally, confirmation of an incomplete vagotomy is achieved by the Hollander test (gastric acid production was measured after hypoglycemia was induced by insulin administration)

18. Which of the following statements are true?
A. In gastric atony, conservative management includes small, frequent meals throughout the day and avoidance of tobacco and alcohol
B. Vitamin B12 or folate deficiency resulting from decreased absorption leads to megaloblastic anemia in up to 50% of patients

C. Altered bowel function is common following gastric reconstruction
D. Iron deficiency secondary to malabsorption or chronic blood loss produces megaloblastic anemia in 50% of cases
E. In postgastrectomy syndromes, approximately one in four patients has loose, frequent stools

19. *Considering the perirectal absces, the following statement is true:
A. It results from an anorectal canal infection and presents as painful formations in the perianal area
B. It results from an anorectal canal infection and presents as painless formations in the perianal area
C. It results from an anorectal canal infection and presents as painful formations in the plantar region
D. It results from a thyroglossal canal infection and presents as painful formations in the perianal area
E. It results from an anorectal canal infection and presents as painless formations in the perineum

20. *The following wonds presents risk in developing tetanos:
A. Wounds older than 6 hours caused by avulsion, crushing, extensive abrasion, contaminated
B. Wounds caused by sharp objects
C. Wounds caused less than 6 hours ago
D. Wounds caused by clean objects
E. Wounds where contaminants are absent

21. *Considering the hand infections, the following statment is true::
A. Subcutaneous panaritiums are deep infections of the fingers
B. Subcutaneous panaritiums are superficial infections of the fingers
C. They are life-threatening
D. They do not lead to severe morbidity
E. Panaritium is a fungal infection of the proximal nail

22. *Considering the breast absces, the following statement is true:
A. It is characterized by severe tenderness, edema, and erythema associated with a palpable mass and frequent soft tissue infection, usually of staphylococcal origin.
B. It is not characterized by severe localized tenderness, edema, and associated with a palpable mass and an area of frequent soft tissue infection, usually of streptococcal origin.
C. Risk factors do not include breastfeeding
D. Risk factors do not include smoking and obesity

E. Risk factors do not include maternal age > 30 years, gestational age > 41 weeks

23. *Considering the acute peritonitis, the following statement is true:
A. Acute appendicitis causes localized peritoneal irritation
B. Appendicitis perforation frequently causes localized peritonitis
C. Acute appendicitis frequently causes generalized peritonitis
D. Colonic perforation with diffuse peritonitis creates the least virulent type of peritonitis
E. Peritonitis causes chronic abdominal pain, rarely accompanied by fever or leukocytosis

24. *Considering the biliary tract infections, the following statement is true:
A. Biliary tract infections are usually a consequence of obstruction in the biliary tree at either the cystic duct or the common bile duct
B. Bacteria least commonly involved Escherichia coli, Klebsiella spp.
C. Anaerobic bacteria are commonly found
D. Bacteria least commonly involved Enterococcus spp., Klebsiella spp.
E. Bacteria least commonly involved Escherichia coli, Enterococcus spp.

25. Considering the biliary tract infections, the following statements are true:
A. Biliary tract infections are usually a consequence of obstruction in the biliary tree at either the cystic duct or the common bile duct
B. In patients with bilioenteric anastomosis, the likelihood of contamination with anaerobes is increased
C. The bacteria most commonly involved are Escherichia coli, Klebsiella spp., Enterococcus spp.
D. The bacteria least commonly involved are Enterococcus spp., Klebsiella spp.
E. Anaerobes are commonly encountered

26. The following aspects are commont for celulitis:
A. Etiology: skin portal of entry
B. Typical organism: Streptococcus
C. Physical examination: warm during palpation, diffuse erythema, pain
D. Treatment: systemic antibiotics and local wound care
E. Treatment: incision and drainage, radiotherapy

27. The following aspects are characteristic for boils/carbuncles:
A. Etiology: bacterial proliferation in skin glands and crypts
B. Typical organism: Staphylococcus
C. Physical examination: localized induration, erythema, tenderness, swelling with purulent drainage
D. Treatment: incision and drainage, systemic antibiotics

E. Etiology: lymphatic vessel infection

28. The following aspects are characteristic for hidradenitis suppurativa:
    A. Etiology: Bacterial overgrowth in apocrine sweat glands
    B. Typical organism: Staphylococcus
    C. Physical examination: Multiple small, subcutaneous abscesses, purulent drainage, usually axillary and inguinal
    D. Treatment: Local wound care, systemic antibiotics, removal of foreign bodies
    E. Treatment: Incision and drainage of small lesions, systemic antibiotics, large areas will require wide local excision and skin graft

29. The following aspect are common for limphangitis:
    A. Etiology: lymphatic vessel infection
    B. Typical organism: Streptococcus
    C. Physical examination: diffuse swelling and erythema of the distal extremity with areas of striated inflammation along the lymphatic channels
    D. Treatment: local wound care, systemic antibiotics, removal of any foreign body, elevation of the extremity
    E. Treatment: incision and drainage of small lesions, systemic antibiotics, large areas will require wide local excision and skin grafting

30. Regarding gangrene/necrotizing soft tissue infections, the following statements are true:
    A. Etiology: destruction of healthy tissue by virulent microbial enzymes
    B. Typical organisms: Streptococcus/Staphylococcus/Clostridium
    C. Physical examination: necrotic skin. fascia, swelling and induration, malodorous drainage, crepitations with subcutaneous emphysema, often with systemic toxic signs and symptoms of sepsis
    D. Treatment: radical debridement/amputation of involved tissues, aggressive local wound care with frequent debridement, broad-spectrum antibiotics
    E. Etiology: lymphatic vessel infection

31. Considering the urinary tract infections (UTI), the following statements are true:
    A. The presence of an urinary catheter is considered to be the greatest risk factor.
    B. The rate of catheter-associated UTI is directly dependent on the technique of palpation of the urinary catheter and the duration of its retention
    C. The rate of catheter-associated UTI is not directly dependent on the technique of palpation of the urinary catheter and the duration of its retention
    D. The least common risk factor is the presence of an endovesical catheter
    E. Systemic bacteremia originating in the urinary tract is common in the absence of functional or anatomic obstruction

32. Considering the surgical wound infections, the following statements are true:
    A. They are generally rare events after elective surgery
    B. They are common after elective surgery
    C. Close wound surveillance is necessary in patients at high risk of infection
    D. Close wound surveillance is not necessary in patients at high risk of infection
    E. Prompt diagnosis and rapid surgical treatment limit morbidity and mortality in many of these cases

33. Primary peritonitis:
    A. It is a spontaneous bacterial peritonitis
    B. It occurs without disruption of the gastrointestinal (GI) tract
    C. It is strictly polymicrobial
    D. It occurs as a result of contamination from a perforated GI tract
    E. It is usually monomicrobial

34. Secondary peritonitis:
    A. Occurs as a result of contamination from a perforated gastrointestinal tract
    B. Usually polymicrobial
    C. Usually monomicrobial
    D. Is a spontaneous bacterial peritonitis
    E. Occurs as a result of contamination from peritoneal dialysis catheters

35. Considering the gastr-dudenal ulcers, the following statements are true:
    A. Approximately 80% of patients have pneumoperitoneum on standing chest radiographs
    B. Approximately 50% of patients have pneumoperitoneum on standing chest radiographs
    C. Approximately 10% of patients have pneumoperitoneum on standing chest radiographs
    D. Perioperative broad-spectrum antibiotic therapy against aerobes and anaerobes is indicated for acute perforations for < 24 hours
    E. Perioperative broad-spectrum antibiotic therapy against aerobes and anaerobes is indicated for acute perforations for < 72 hours

36. The following wound types presents risk in developing tetanos:
    A. Crushing
    B. Avulsion
    C. Burns or frostbite
    D. Extensive abrasion
    E. With no contaminants present, produced by clean, sharp objects

37. Risc factors for breast absces includes:
    A. Breastfeeding
    B. First pregnancy
    C. Underweight
    D. Fiber and green vegetable consumption
    E. Obesity

38. Considering the perirectal absces, the following statments are true:
    A. It can extend into the pelvis
    B. It can extend above the pelvic floor
    C. It is painless
    D. It can not extend into the pelvis
    E. It can be fatal in diabetic or immunosuppressed patients

39. Regarding the perirectal abscess, the following are true:
    A. General anesthesia is usually required for examination and adequate drainage
    B. Broad spectrum antibiotic treatment is used
    C. Narrow spectrum antibiotic treatment is used
    D. It can not extend to the pelvis
    E. It presents as a painful mass situated in the perianal region

40. The following are true for the infections of the hand:
    A. They are not generally life-threatening
    B. Can lead to severe morbidity due to loss of function as a result of fibrosis
    C. Are life-threatening
    D. Cannot lead to severe morbidity due to loss of function as a result of fibrosis
    E. Can lead to severe morbidity due to loss of function as a result of contracture

41. The following are true regarding the breast abscess:
    A. Antistaphylococcal antibiotics and ultrasound-guided needle aspiration are considered the initial treatment options
    B. Surgical drainage is associated with worse cosmetic result
    C. Smoking and obesity are not risk factors
    D. Breastfeeding is not a risk factor
    E. If there is a risk of malignancy, a biopsy should be performed

42. The following are true regarding the breast abscess:
    A. It is characterized by local severe sensitivity, edema and erythema
    B. It represents a frequent soft tissue infection
    C. Breastfeeding is not a risk factor

D. Smoking and obesity are not risk factors
E. Antistaphylococcal antibiotics and ultrasound-guided serial needle aspiration should be the initial treatment option

43. *Littre hernia contains :
A. Cecal appendix
B. Colon
C. Meckel's diverticulum
D. Fallopian tube
E. Round ligament

44. *The most frequent complication of a femoral hernia is :
A. Seroma
B. Infection
C. Strangulation
D. Perforation
E. Postoperative neuropathy

45. *Spigelian hernia appears in the following area :
A. Linea alba
B. Arcuate line
C. Obturator foramen
D. Epigastrum
E. Grynfelt quadrilateral

46. *Muscle diastasis represents:
A. The rupture of the rectus abdominis muscles
B. The relaxation of the inguinal ligament
C. Relaxation of the lumbar muscles
D. Thinning of the superior abdominal midline
E. Widening of the superficial inguinal orifice

47. *For the differential diagnosis of inguinodynia the following is not included:
A. Acute gastritis
B. Microfracture
C. Injury of the femoroacetabular joint
D. Varicocele
E. Orchialgia

48. *Frequent postoperative complications after abdominal wall hernias treatment are not:
A. Seroma

B. Infection
C. Renal colic
D. Postoperative neuropathy
E. Postoperative recurrence

49. *The vascularization of the central abdominal wall is:
A. Superior and inferior epigastric veins
B. Internal safenous vein
C. External safenous vein
D. Femoral artery
E. Internal iliac artery

50. *Spiegelian hernia appears:
A. In the area where the inferior margin of posterior fascia unites with the lateral margin of the rectus abdominis
B. At the level of linea alba
C. In the area of junction of the rectus abdominis muscles
D. In the inguinal area
E. In the subombilical area

51. *An indirect inguinal hernia appears when:
A. The abdominal content herniates medially to the epigastric vessels
B. The abdominal content herniates laterally to the epigastric vessels
C. There is not such a type of hernia
D. The abdominal content herniates in the scrotum
E. The abdominal content herniates through the elements of the spermatic cord

52. Frequent postoperative complications in hernia surgery are:
A. Seroma
B. Infection
C. Postoperative neuropathy
D. Hydrocele
E. Postoperative recurrence

53. The Bassini technique is used for the following hernias:
A. Inguinal direct
B. Obturator
C. Inguinal indirect
D. Femoral
E. Lumbar

54. Strangulation is a complication of the following types of hernia:
    A. Indirect inguinal
    B. Femoral
    C. Diastazis recti
    D. Post-incisional
    E. Umbilical

55. The following surgical techniques are used for hernias of the myopectineal orifice:
    A. Bassini procedure
    B. Lichtenstein procedure
    C. McVay procedure
    D. Winkelman procedure
    E. Shouldice procedure

56. Hernias of the abdominal wall are :
    A. Ventral hernia
    B. Umbilical hernia
    C. Post-incisional hernia
    D. Obturator hernia
    E. Inguinal hernia

57. Clinical signs of a strangulated hernia are:
    A. Vomiting
    B. Acute pain
    C. Fever
    D. Tachycardia
    E. Singultus

58. Paraclinical examinations for hernias of the abdominal wall are:
    A. Plain abdominal X-ray
    B. Ultrasound
    C. Colonoscopy
    D. MRI
    E. CT

59. McVay technique is used for the treatment of following hernias:
    A. Femoral
    B. Direct inguinal
    C. Umbilical
    D. Obturator
    E. Indirect inguinal

60. Clinical signs for a complicated femoral hernia are:
    A. Pain
    B. Pyrosis
    C. Vomiting
    D. Fever
    E. Jaundice

61. MPO (myopectineal orifice) hernias are:
    A. Lumbar
    B. Femoral
    C. Indirect inguinal
    D. Direct inguinal
    E. Obturator

62. The advantages of minimally invasive surgical treatment of hernias are:
    A. Lower morbidity
    B. Reduction in surgical site infections
    C. Shorter surgery time
    D. Shorter hospital stay
    E. Faster recovery

63. Risk factors for inguinal hernia recurrence are:
    A. Obesity
    B. Age
    C. Smoking
    D. Pregnancy
    E. The dimensions of the hernia

64. Alloplastic (mesh) surgical repair techniques are used for the following hernias:
    A. Inguinal
    B. Umbilical
    C. Obturator
    D. Femoral
    E. Epigastric

65. The following are primary tissue repairs for miopectineal hernias:
    A. McVay technique
    B. Bassini technique
    C. Whipple technique
    D. Reichel-Polya technique

E. Shouldice technique

66. The differential diagnosis of inguinodynia takes into consideration the following genito-urinary pathologies:
    A. Varicocele
    B. Prostatitis
    C. Diverticulitis
    D. Urinary tract infection
    E. Endometriosis

67. In the case of inguinal hernias, among the frequent postoperative complications we encounter:
    A. Postoperative inflammation
    B. Varicose veins
    C. Scrotal ecchymosis
    D. Acute appendicitis
    E. Labial ecchymosis

68. Clinically, hernias can be:
    A. Asymptomatic
    B. Symptomatic
    C. Subacute
    D. Acute
    E. Hyperacute

69. Hernia repair technique options include:
    A. Anatomical techniques
    B. Allopastic techniques
    C. Component separation techniques
    D. Nonsurgical techniques
    E. Noninvasive techniques

70. The anatomical surgical technique for hernia repair involves:
    A. Closure of the parietal defect by surgical suturing
    B. It is reserved for hernias with a low risk of recurrence
    C. It is not indicated in the surgical treatment of hernias with a small parietal defect
    D. It is indicated in the surgical treatment of hernias with a small parietal defect
    E. It is an outdated surgical procedure

71. Alloplastic surgical repair techniques for hernias imply:
    A. Placing a prosthesis to strengthen the abdominal wall

B. Permanent closure of the hernia defect
C. It is especially used in hernias with a high risk of recurrence
D. Can only be performed as laparoscopic procedures
E. Have no utility

72. Frequent postoperative complications after the surgical treatment of inguinal hernias are:
A. Seroma
B. Surgical site infection
C. Recurrent hernia
D. Evisceration
E. Postoperative neuropathies

73. The differential diagnosis of inguinal pain can be made with:
A. Muscle strain
B. Round ligament pain
C. Varicocele
D. Inflammatory bowel disease
E. Gastric ulcer

74. The differential diagnosis of inguinodynia can be made with :
A. Hip joint disorders
B. Genitourinary disorders
C. Gastrointestinal disorders
D. Neurological disorders
E. Hematopoietic system disorders

75. Obturator hernia:
A. Is a distinct category of hernias
B. Is the result of a defect of the pelvic floor, at the level of the obturator foramen
C. Usually the small intestine herniates through the defect
D. Usually the colon herniates through the defect
E. Usually the omentum herniates through the defect

76. Lichtenstein alloplastic procedure:
A. Is a type of anterior mesh repair
B. The mesh is placed over the posterior wall of the inguinal canal
C. The mesh margins are fixed on the limits of the superior area of the MPO ((myopectineal orifice)
D. The external oblique aponeurosis is sutured over the mesh, but is left open inferiorly
E. It has a high rate of hernia recurrence

77. Obesity is a chronic disease. Its etiology includes:
A. Environmental etiology
B. Genetic etiology
C. Behavioral etiology
D. Morbid etiology
E. Neurohormonal etiology

78. The regulation of appetite decisively involves:
A. Hypothalamus
B. Stomach
C. Brain
D. Adipocyte
E. Muscle tissue

79. *BMI (Body Mass Index) is calculated as follows:
A. BMI = height (m) / [weight (kg)]^2
B. BMI = weight (kg) / [height (cm)]^2
C. BMI = weight (g) / [height (m)]^2
D. BMI = weight (kg) / [height e (m)]^2
E. BMI = weight (g) / [height (cm)]^2

80. BMI does not take into account the following factors:
A. Weight
B. Muscle mass
C. Body circumference
D. Height
E. Bone density

81. Bariatric surgery is indicated for patients with:
A. BMI between 35 and 40 with associated comorbidities
B. BMI between 35 and 40 without associated comorbidities
C. BMI over 40 without associated comorbidities
D. BMI over 40 regardless of comorbidities
E. BMI between 30 and 35 without associated comorbidities

82. Body weight classification according to BMI includes:
A. Underweight – BMI < 18.5
B. Overweight – BMI = 25.0–29.9
C. Normal weight – BMI = 18.5–24.9
D. Morbid obesity – BMI = 30.0–39.9
E. Obesity – BMI > 40.0

83. Comorbidities associated with obesity include:
A. Insulin resistance
B. Dyslipidemia
C. Sleep apnea
D. Bone cancer
E. Arterial hypertension

84. Relative contraindications for bariatric surgery include:
A. Arterial hypertension
B. Severe heart failure
C. Unstable coronary artery disease
D. Type 2 diabetes mellitus
E. Cirrhosis with portal hypertension

85. Preoperative investigations for bariatric surgery must include:
A. Basic nutritional assessment
B. Fecal occult blood test
C. Cardiovascular evaluation
D. Colonoscopy
E. Respiratory assessment

86. *The treatment of overweight and obese individuals does not include:
A. Diet
B. Physical exercise
C. Sedentary lifestyle
D. Pharmacotherapy
E. Bariatric surgery

87. *The only obesity treatment that has successfully helped patients lose significant weight without regaining it is:
A. Diet
B. Physical exercise
C. Sedentary lifestyle
D. Pharmacotherapy
E. Bariatric surgery

88. Currently FDA-approved anti-obesity medications are:
A. Phentermine
B. Acetylcysteine
C. Orlistat

D. Lorcaserin
E. Liraglutide

89. *The bariatric surgical procedure that combines malabsorption and restriction is:
A. Adjustable gastric banding
B. Sleeve gastrectomy
C. Roux-en-Y gastric bypass
D. Biliopancreatic diversion
E. Biliopancreatic diversion with duodenal switch

90. Strictly restrictive bariatric procedures include:
A. Biliopancreatic diversion
B. Biliopancreatic diversion with duodenal switch
C. Roux-en-Y gastric bypass
D. Sleeve gastrectomy
E. Adjustable gastric banding

91. Strictly malabsorptive bariatric procedures include:
A. Biliopancreatic diversion
B. Roux-en-Y gastric bypass
C. Biliopancreatic diversion with duodenal switch
D. Adjustable gastric banding
E. Sleeve gastrectomy

92. Selection criteria for patients eligible for obesity surgery are:
A. BMI < 40 kg/m2 without associated comorbidities
B. BMI > 40 kg/m2 without associated comorbidities
C. BMI between 35-40 kg/m2 with associated comorbidities
D. BMI between 35-40 kg/m2 without associated comorbidities
E. Any type of morbid obesity, regardless of comorbidities

93. *The most commonly performed bariatric procedure today is:
A. Roux-en-Y gastric bypass
B. Sleeve gastrectomy
C. Adjustable gastric banding
D. Biliopancreatic diversion
E. Pancreatic diversion with duodenal switch

94. Early complications of bariatric procedures include:
A. Nutritional disorders
B. Anastomotic fistula

C. Bleeding
D. Infection
E. Afferent loop syndrome

95. Late complications of bariatric procedures include:
A. Nutritional disorders
B. Marginal ulcer and anastomotic stenosis
C. Internal hernia
D. Afferent loop syndrome
E. Anastomotic fistula

96. *The most important postoperative nutritional disorder in Roux-en-Y gastric bypass is:
A. Iron deficiency
B. Vitamin D deficiency
C. Vitamin B12 deficiency
D. Vitamin C deficiency
E. Folic acid deficiency

97. Medications useful in the treatment of bariatric surgery complications include:
A. Low molecular weight heparin
B. Warfarin
C. Ursodeoxycholic acid
D. Nonsteroidal anti-inflammatory drugs (NSAIDs)
E. Antispasmodics

98. Surgical treatment of obesity:
A. Improves comorbidities
B. Reduces mortality
C. Replaces lifestyle changes
D. Decreases healthcare costs
E. Is not routinely performed laparoscopically

99. Bariatric surgery has a beneficial effect on:
A. Type 2 diabetes mellitus
B. Arterial hypertension
C. Dilated cardiomyopathy
D. Sleep apnea
E. Angina pectoris

100. Anastomotic fistulas following bariatric surgery occur in the following procedures:
A. Gastric banding

B. Adjustable gastric banding
C. Roux-en-Y gastric bypass
D. Biliopancreatic diversion
E. Biliopancreatic diversion with duodenal switch

101. Symptoms of internal hernia after Roux-en-Y gastric bypass include:
A. Diarrhea
B. Postprandial abdominal pain
C. Nausea
D. Vomiting
E. Hematemesis

102. Abdominal trauma occurs as a result of:
A. Penetrating wounds
B. Electrocution
C. Blunt force
D. Ingestion of acidic or basic substances
E. Exposure to fire

103. *Life-threatening intra-abdominal hemorrhage frequently leads to:
A. Anaphylactic shock
B. Obstructive shock
C. Sinus bradycardia
D. Hemorrhagic shock
E. Hypertensive crisis

104. The abdominal flank is defined as the region located between:
A. Posterior axillary line
B. Anterior axillary line
C. Pubic symphysis
D. Iliac crest
E. Lower ribs

105. In penetrating wounds, the most commonly affected are:
A. Small intestine
B. Large intestine
C. Mesentery
D. Mesocolon
E. Spleen

106. Abdominal palpation can reveal:

A. Localized or diffuse abdominal sensitivity
B. Abdominal distension secondary to intra-abdominal hemorrhage
C. Signs of peritoneal irritation
D. Pelvic fractures
E. Fascial or muscular defects of the abdominal wall

107. *In hemodynamically stable patients, the gold standard for diagnosing intraperitoneal or retroperitoneal organ injuries is:
A. Abdominal-pelvic X-ray
B. FAST abdominal ultrasound
C. CT (computed tomography) evaluation
D. MRI evaluation
E. Contrast-enhanced ultrasound

108. Which of the following statements are true regarding FAST ultrasound:
A. It is a rapid diagnostic method
B. It cannot assess free fluid in the abdomen and pericardium
C. It has replaced diagnostic peritoneal lavage
D. It has low diagnostic accuracy
E. It can be easily performed by a surgeon, radiologist, or emergency physician

109. The following statements about penetrating wounds are true:
A. Penetrating wounds with peritonitis do not require laparotomy
B. They have a high incidence of visceral injuries
C. Stable patients without peritonitis may have injuries limited to the abdominal wall
D. In gunshot wounds, bullets always follow a straight path
E. Performing a CT scan reduces the need for exploratory laparotomies

110. *Hepatic contusions are classified into:
A. 4 grades
B. 3 grades
C. 2 grades
D. 6 grades
E. 5 grades

111. Splenic injuries with active bleeding and arterial hypotension:
A. Require total splenectomy
B. Can be treated by angioembolization to preserve the spleen
C. Require splenorrhaphy
D. Can be managed conservatively
E. Diffuse hemoperitoneum may be present on abdominal CT

112. Traumatic pancreatic injuries can be evaluated by:
   A. Abdominal X-ray
   B. CT scan
   C. Magnetic Resonance Cholangiopancreatography (MRCP)
   D. Endoscopic Retrograde Cholangiopancreatography (ERCP)
   E. Endoscopic ultrasound

113. In left hemidiaphragm trauma, associated injuries frequently involve:
   A. Stomach
   B. Liver
   C. Spleen
   D. Small intestine
   E. Pancreas

114. *The following statements about renal trauma are true, except:
   A. The kidney is relatively protected due to its retroperitoneal location
   B. Renal contusions rarely require surgical intervention
   C. Nephrectomy is necessary in extensive parenchymal injuries
   D. Penetrating injuries are often self-limiting, including those involving vessels
   E. The Foley catheter should be maintained for 7–10 days or until hematuria resolves

115. The following statements about small intestine and mesentery trauma are false:
   A. Intestinal wall contusion can lead to delayed perforation
   B. The presence of “seatbelt signs” on the abdomen is associated with a low risk of intestinal injury
   C. The small intestine and mesentery are frequently injured in stab or gunshot wounds
   D. Repair is easy and involves suturing the defect
   E. Stapled sutures or resection are not indicated for mesenteric injuries

116. In colon trauma, we may encounter:
   A. Extensive injuries involving the mesentery that require resection and anastomosis
   B. Colostomy is often necessary
   C. In extraperitoneal rectal injuries, diversion of the fecal stream until healing
   D. Projectile injuries that often cannot be repaired by primary suture
   E. The presence of multiple organ injuries or shock presents a low risk for anastomotic fistula development

117. Damage control in abdominal trauma includes:
   A. Laparotomy for hemorrhage and/or contamination control
   B. The “lethal triad” which includes hyperthermia, alkalosis, and coagulopathy

C. Life-threatening hemorrhage control may be achieved by suturing injured blood vessels and packing solid organs with surgical drapes
D. Damage control surgery usually lasts between 60–90 minutes
E. After stabilization, the patient returns to the operating room in 12–48 hours for removal of hemostatic packing and gastrointestinal tract reconstruction

118. The following statements about abdominal compartment syndrome are true:
A. It occurs when intra-abdominal pressure exceeds 50 mmHg
B. It compromises perfusion to intraperitoneal and retroperitoneal organs
C. If untreated, it leads to multiple organ dysfunction syndrome (MODS)
D. Diagnosis is facilitated by measuring bladder pressure, which indirectly reflects intraperitoneal pressure
E. Treatment involves prompt decompression via midline incision

119. *The neurological exam begins during the primary assessment and evaluates:
A. Loss of consciousness
B. Presence of seizures
C. Level of alertness after trauma
D. Motor function in the extremities
E. All of the above

120. *Traumatic injuries of the chest do not include:
A. Tension pneumothorax
B. Massive hemothorax
C. Cardiac tamponade
D. Bronchopneumonia
E. Flail chest

121. *Cardiac tamponade:
A. Presents clinically with muffled heart sounds, jugular venous distension, and hypotension (Beck’s triad)
B. Is not a life-threatening condition
C. Treatment aims to reduce cardiac output
D. Presents clinically with loud heart sounds
E. Can only occur through an open precordial injury

122. *Hemorrhage classification:
A. Class II – Heart rate (beats/min) < 100
B. Class IV – Heart rate (beats/min) > 140
C. Class III – Blood loss > 40%
D. Class IV – Blood loss (ml) in a 70 kg person between 750–1,500

E. Class I – Low blood pressure

123. *Glasgow Coma Scale:
   A. It is a method that is difficult to reproduce
   B. Its values range between 3 and 20
   C. Scores of 3 and 4 are associated with death or a vegetative state in almost 97% of cases
   D. It cannot be used as a prognostic indicator
   E. It cannot be influenced by alcohol or recreational drug use

124. Advanced Life Support guides the prioritization of patient management by focusing on:
   A. Primary assessment
   B. Tertiary assessment
   C. Temporary care
   D. Secondary assessment
   E. Definitive care

125. Primary assessment:
   A. Is described by the ABCDE acronym
   B. Is based on identifying and immediately treating life-threatening injuries
   C. Does not include complete skin examination
   D. Does not involve initiation of resuscitation
   E. Involves evaluation of airway patency and stability

126. Hemorrhage:
   A. Is a rare cause of trauma-related shock
   B. Treatment involves restoration of circulating blood volume
   C. In severe shock, blood product transfusion must be initiated
   D. The severity of hemorrhagic shock is classified based on the percentage of circulating blood volume lost
   E. Intrathoracic hemorrhage can be temporarily controlled by direct compression or use of a tourniquet

127. Common signs and symptoms in shock include:
   A. Tachycardia
   B. Hypotension
   C. Hypertension
   D. Tachypnea
   E. Polyuria

128. Flail chest:

A. Occurs when two or more adjacent ribs are fractured in two or more places
B. On chest inspection, paradoxical movement of the affected segment is observed
C. Is frequently associated with underlying pulmonary parenchymal contusion
D. Surgical stabilization of the affected segment has not been shown to reduce morbidity
E. Aggressive fluid resuscitation is recommended

129. Closed pneumothorax :
A. Occurs when air enters the pleural cavity, causing contralateral lung collapse
B. Physical exam reveals decreased breath sounds on the affected side
C. Physical exam reveals hyperresonance on percussion
D. Physical exam reveals normal breath sounds on the affected side
E. Diagnosis is confirmed by chest X-ray

130. Hemothorax:
A. Occurs when air accumulates in the pleural space
B. On physical examination, breath sounds are absent
C. On physical examination, hyperresonance is noted on percussion
D. Treatment involves insertion of a chest tube
E. Proper drainage and chest tube positioning are verified via post-procedure X-ray

131. Aortic contusions:
A. Are the most common traumatic thoracic injuries
B. Have high lethality potential
C. Are caused by rapid deceleration mechanisms
D. Full-thickness aortic ruptures result in massive exsanguination and death within minutes after the accident
E. Occur due to shearing forces at the junction between the mobile aortic arch and the immobile descending thoracic aorta

132. Radiologic signs of aortic contusion include:
A. Widened mediastinal opacity
B. Decreased mediastinal opacity
C. Blurring of the aortic arch contour
D. Inferior displacement of the left main bronchus
E. Leftward displacement of the trachea

133. Rib fractures:
A. Are the most common thoracic injury caused by blunt trauma
B. Are identified clinically as sensitive points on palpation along the rib
C. The location of rib fractures helps diagnose associated injuries
D. Fractures of the first 3 ribs are associated with aortic or great vessel injuries

E. Mid-thoracic rib fractures are often associated with diaphragmatic injuries

134. Emergency department thoracotomy:
A. In certain cases, it can be beneficial and considered a life-saving maneuver
B. Allows quick access to perform pericardiotomy, open cardiac massage, aortic clamping
C. Should be considered for patients with penetrating trauma who lost vital signs less than 15 minutes prior to arrival
D. Resuscitative thoracotomy can be performed even in the absence of a surgeon experienced in managing complex thoracic injuries
E. Is indicated for patients with prolonged cardiac arrest after penetrating trauma

135. The classic presentation of neurogenic shock includes:
A. Hypertension
B. Tetraplegia
C. Bradycardia
D. Cold extremities
E. Warm extremities

136. *Fourth-space fluid sequestration refers to:
A. Fluid accumulation in the peritoneum
B. Fluid accumulation in the retroperitoneum
C. Fluid accumulation in both the peritoneum and retroperitoneum
D. Diffuse retroperitoneal bleeding
E. None of the above

137. *Regarding abdominal compartment syndrome:
A. It may compromise blood flow to intraperitoneal organs
B. It usually does not affect blood supply to retroperitoneal organs
C. It occurs at intra-abdominal pressures above 12 mmHg
D. It may lead to restricted diaphragmatic movement
E. None of the above

138. *In the case of pelvic fractures:
A. Diagnosis cannot be established until a CT scan is performed
B. Bruising on the lower abdomen, thighs, and buttocks may indicate a pelvic fracture
C. Perineal examination should be performed to detect closed fractures
D. Active bleeding is most often due to an arterial source
E. All of the above statements are correct

139. *Surgical exploration in pelvic fractures:

A. Is the first option due to hemorrhages that may form large retroperitoneal hematomas requiring evacuation
B. Should be avoided in the presence of multiple injuries including splenic trauma
C. Pelvic packing with surgical drapes is a method to avoid, as it does not address the source of the hematoma
D. May resolve bleeding from the fracture edge
E. All answers are incorrect

140. In neck trauma:
A. The anterior region of the neck is divided into 4 zones (I to IV) for clinical evaluation and management
B. Shock and clear signs of structural injury in zones I and II require emergency surgical exploration
C. In hemodynamically stable patients, even with injuries in zones I and II, a conservative approach may initially be adopted
D. Classical evaluation includes angiography, bronchoscopy, and esophagoscopy/esophagography
E. CT with contrast is a highly effective method for diagnosing neck injuries

141. In spinal cord injuries due to neck trauma:
A. 10% of penetrating neck injuries result in spinal cord damage
B. Spinal cord injuries are the most common neurological injuries along with brachial plexus lesions
C. The most common nerve injuries involve cranial nerves
D. Spinal cord injuries above C4 are associated with high mortality
E. To prevent irreversible nerve damage, early intravenous steroid administration is recommended

142. Extremity injuries:
A. Are commonly encountered in both open and closed trauma
B. Severity can range from minor injuries to fatal outcomes
C. Life-threatening injuries may include open fractures
D. In cases of major vessel injury, a rigid splint cannot be applied for immobilization
E. Compartment syndrome requires urgent initiation of steroidal anti-inflammatory treatment

143. In extremity trauma, definite signs of acute bleeding may include:
A. Pulsatile bleeding
B. Non-expanding hematoma
C. Deep hematoma
D. Bruit (vascular murmur)

E. Cool extremities

144. Open fractures of the extremities:
A. Can be life-threatening
B. Closed fractures contaminated with bacteria may lead to osteomyelitis and limb amputation
C. May result in complications such as poor bone healing
D. May lead to wound infections
E. Are the most frequent type of trauma to the lower limb

145. The main causes of trauma during pregnancy are:
A. Road traffic accidents
B. Physical assault, in up to 30% of cases
C. Psychological disorders during pregnancy
D. Burns
E. Frostbite

146. The main causes of fetal death due to trauma are:
A. Road traffic accidents
B. Gunshot wounds
C. Accidental ingestion by the mother of strong acids
D. Accidental ingestion by the mother of alkaline solutions
E. Physical abuse suffered by the mother

147. Pediatric trauma:
A. Is more frequently seen in children aged 9 to 12 years
B. Is the leading cause of death in children
C. Is the primary cause of disability in children under 14 years of age
D. In children aged 1 to 14, road traffic accidents account for approximately half of all death causes
E. Burns are the second leading cause of trauma-related death in children, after road traffic accidents

148. The main mechanisms of trauma in the elderly are:
A. Falls
B. Falls from height
C. Assaults
D. Motor vehicle accidents
E. Burns

149. Trauma in the elderly:

A. Mortality is high among elderly individuals with trauma
B. Comorbidities play a decisive role in trauma-related deaths
C. Although cardiovascular comorbidities are most common, elderly patients have a reduced inflammatory response to trauma, which may lead to more stable hemodynamics compared to younger patients
D. Cardiovascular medications prescribed to elderly patients may influence shock diagnosis
E. Age alone is not the strongest predictor of outcomes in elderly patients with rib fractures

150. In cases of severe trauma during pregnancy:
A. Sometimes, perimortem cesarean delivery may be necessary to save the fetus, but chances of survival are low if performed more than 4 minutes after the loss of maternal vital signs
B. Perimortem cesarean delivery is only applied in advanced pregnancies where fetal survival is possible
C. Perimortem cesarean delivery is not indicated in patients who have not yet been declared dead
D. Perimortem cesarean offers the best chances of fetal survival within the first 30 minutes after the loss of maternal vital signs
E. Perimortem cesarean may be performed in patients in cardiorespiratory arrest or with imminent arrest

151. Management of pediatric trauma considers:
A. Resuscitation priorities in children differ from those in adults
B. In pediatric patients with oxygen saturation <90%, airway compromise should be suspected, as children generally do not have chronic respiratory conditions like adults
C. Hypoventilation often results from brain injury or shock
D. A traumatized child may require orotracheal intubation even just to allow appropriate investigation
E. CT scan is not among the imaging techniques used in diagnosing trauma in children

152. *In adults, the spleen has the following functions:
A. Hematopoiesis
B. Filtration of leukocytes reaching the end of their lifespan (110–120 days)
C. Synthesis of platelets
D. Immunomodulation
E. Filtration of immunoglobulin M

153. *Splenectomy is followed by:
A. Transient leukopenia
B. Persistent leukopenia
C. Temporary thrombocytosis
D. Temporary thrombocytopenia
E. Unchanged complete blood count

154. Arterial blood supply of the spleen:
A. Is provided exclusively by the splenic artery, a branch of the celiac trunk
B. Is provided by the splenic artery and short gastric arteries, branches of the left gastroepiploic artery
C. In case of splenic artery occlusion, splenic infarction occurs
D. In case of splenic artery occlusion, short gastric arteries provide collateral flow
E. In case of splenic artery occlusion, the superior pancreaticoduodenal artery ensures arterial flow

155. Venous drainage of the spleen occurs via:
A. Exclusively through the splenic vein
B. Exclusively through the short gastric veins
C. Through the splenic vein, which joins the superior mesenteric vein to form the portal vein
D. Through the short gastric veins and the splenic vein
E. Through an anastomosis with the left renal vein, draining into the inferior vena cava

156. Accessory spleens:
A. Occur in 10–30% of the population
B. Occur in 30–50% of the population
C. Are frequently located in the splenic hilum, splenic suspensory ligaments, or omentum
D. Have no functions, therefore are of no practical importance
E. Failure to identify and remove accessory spleens may lead to recurrence of hematologic diseases treated by splenectomy

157. The spleen functions to:
A. Filter blood
B. Perform extramedullary hematopoiesis in the fetus
C. Possibly sequester and destroy granulocytes and platelets
D. Synthesize granulocytes and platelets
E. Participate in immune processes, providing both specific and non-specific immune responses

158. *Plain abdominal X-ray is useful in spleen evaluation for:
A. Determining the exact size of the spleen
B. Assessing the hematopoietic function of the spleen
C. Identifying left lower rib fractures, suggestive of splenic injury
D. Evaluating the pancreas affected secondarily by splenic disease
E. Assessing splenic vascularization

159. *Scintigraphy is useful in spleen evaluation:
A. For information regarding spleen size only
B. For information regarding spleen function only
C. To detect accessory or ectopic spleens
D. To monitor splenic trauma
E. To guide fine-needle aspiration

160. In clinical evaluation of a patient with possible splenic disease, it is important to know:
A. Bleeding history, if present (e.g., spontaneous epistaxis, gingival bleeding, menorrhagia)
B. History of medications that may interfere with platelet function
C. Personal and family history of hematologic diseases (e.g., lymphoma, leukemia)
D. Painful splenomegaly in hematologic disorders
E. Painless splenomegaly in splenic infection, infarction, or rupture

161. Abdominal ultrasound is useful for evaluating:
A. The size of the spleen
B. The functions of the spleen
C. The presence of splenic cysts or splenic abscesses
D. Rapid assessment of patients with trauma for the presence of blood in the peritoneal cavity
E. The vascularization of the spleen, through Doppler ultrasound

162. Contrast-enhanced Computed Tomography (CT) is the preferred method for:
A. Determining the size and lesions of the spleen
B. Highlighting other concomitant abdominal injuries/conditions
C. Identifying splenic cysts or abscesses
D. Performing percutaneous drainage of splenic cysts or abscesses under CT guidance
E. Monitoring splenic lesions

163. Splenic angiography is useful:
A. In hemodynamically stable patients with abdominal trauma where ultrasound shows intra-abdominal free fluid
B. In hemodynamically unstable patients with abdominal trauma where ultrasound shows

intra-abdominal free fluid
C. In the evaluation of splenic tumors
D. For embolization of the splenic artery
E. For monitoring patients with hypersplenism

164. *In a healthy person, after surgical removal of the spleen (splenectomy):
A. White blood cell count transiently increases, on average by 50% above the upper normal limit, returning to normal after 5–7 days
B. White blood cell count transiently increases, on average by 30% above the upper normal limit, returning to normal after 2–4 days
C. White blood cell count transiently decreases, on average by 50% below the lower normal limit, returning to normal after 5–7 days
D. White blood cell count transiently decreases, on average by 30% below the lower normal limit, returning to normal after 5–7 days
E. White blood cell count is not influenced by splenectomy

165. After splenectomy, in 50% of patients, the platelet count:
A. Increases transiently by up to 30% between day 2 and day 10 post-splenectomy and usually returns to normal within about two weeks
B. Decreases transiently by up to 30% between day 2 and day 10 post-splenectomy and usually returns to normal within about two weeks
C. Increases transiently by up to 50% between day 2 and day 10 post-splenectomy and usually returns to normal within about two weeks
D. Antiplatelet therapy is indicated if platelet count exceeds 750,000/mm^3, until it returns to normal
E. Anticoagulant therapy is indicated if platelet count exceeds 750,000/mm^3, until it returns to normal

166. The pneumococcal vaccine (polyvalent) is recommended:
A. Only in patients with total splenectomy
B. In patients with both total and conservative (partial) post-traumatic splenectomy
C. Not indicated in patients with splenic trauma managed non-operatively
D. In patients scheduled for elective splenectomy, vaccination should be administered prior to surgery
E. Provides total protection against severe post-splenectomy infections (OPSI)

167. *The main symptom of achalasia is:
A. Pain
B. Regurgitation
C. Progressive dysphagia to solids and then to liquids

D. Heartburn
E. Progressive dysphagia to liquids and then to solids

168. *The endoscopic surgical therapy for achalasia, POEM (Peroral Endoscopic Myotomy), consists of:
A. Endoscopic balloon dilation of the lower esophageal sphincter (LES)
B. Upper GI endoscopy with botulinum toxin injection into the LES
C. Endoscopic creation of a submucosal tunnel in the esophagus followed by LES myotomy
D. Laparoscopic Heller myotomy
E. Thoracoscopic LES myotomy

169. Achalasia:
A. Is a degenerative disease of the myenteric (Auerbach) nerve plexus causing denervation of the esophagus
B. Results in relaxation of the LES during swallowing
C. Results in lack of LES relaxation during swallowing
D. Results in absence of esophageal peristalsis
E. Results in esophageal hyperperistalsis

170. Diagnosis of achalasia is made by:
A. Endoscopic ultrasound (EUS)
B. Barium swallow, typically showing the “bird’s beak” sign
C. Manometry showing failure of LES relaxation during swallowing along with absence of normal peristaltic contractions
D. Diagnostic laparoscopy
E. Endoscopy to rule out other distal obstruction causes like esophageal carcinoma (pseudoachalasia)

171. Treatment of achalasia is:
A. Curative, with permanent healing
B. Limited to palliative interventions, as the disease cannot be cured
C. Aimed at relieving LES spasm through medication, endoscopic intervention, or surgical myotomy
D. Involves endoscopic balloon dilation and surgical myotomy
E. Involves resection of the distal esophagus including the LES

172. Surgical treatment of achalasia via Heller myotomy:
A. Can be performed via transthoracic or transabdominal approach
B. Can only be performed laparoscopically
C. Laparoscopic approach offers better patient comfort and improved visualization of the

myotomy
D. It’s important to extend the myotomy onto the stomach by at least 2–3 cm
E. Fundoplication is performed simultaneously to prevent gastroesophageal reflux once the LES becomes incompetent

173. *A 52-year-old man, incidentally found to have an 8 mm asymptomatic esophageal lesion 6 months ago. Endoscopy shows an 8 mm tumor without mucosal changes; barium swallow confirms a well-defined 8 mm mass. What is the therapeutic management?
A. Surgical intervention: enucleation of the lesion via thoracotomy or thoracoscopy
B. Endoscopic enucleation of the lesion
C. Monitoring via endoscopic ultrasound (EUS)
D. Fine needle aspiration or biopsy to determine if benign or malignant
E. Clinical monitoring until dysphagia appears

174. The majority of benign esophageal lesions:
A. Occur in the mid and distal esophagus
B. Occur in the proximal esophagus
C. Frequently present with pain
D. Frequently present with dysphagia
E. Are evaluated by barium swallow and endoscopy

175. Benign esophageal lesions are:
A. Uncommon (rare)
B. Frequently encountered
C. Usually asymptomatic and discovered incidentally
D. Most commonly leiomyomas, located in the muscular layer
E. Dysphagia appears as a symptom

176. *A long-term complication of caustic substance ingestion is:
A. Acute respiratory failure
B. Airway edema
C. Formation of esophageal strictures
D. Chronic respiratory failure
E. Transmural burn

177. *The first priority in emergency treatment of caustic substance ingestion is:
A. Neutralization of the caustic substance
B. Induction of vomiting
C. Maintaining esophageal patency
D. Administration of steroids
E. Antibiotic therapy

178. Caustic substance ingestion:
A. Acid ingestion usually causes deeper injuries
B. Alkaline ingestion usually causes deeper injuries
C. The ability to ingest acid is limited by extreme burning sensation in the mouth
D. The ability to ingest alkali is limited by extreme burning sensation in the mouth
E. Alkaline ingestion results in full-thickness esophageal wall damage

179. Evaluation of burns caused by caustic substances includes:
A. Assessing the exact reason for ingestion
B. Early identification of the etiologic agent (acidic, alkaline), as they require different approaches
C. Physical examination of the oropharynx to estimate injury severity and determine the need for endotracheal intubation in case of upper airway edema
D. Early flexible endoscopy within the first 24 hours to minimize the risk of perforation
E. Severity is classified based on depth: from superficial first-degree burns to full-thickness third-degree burns

180. Treatment of post-caustic esophageal strictures includes:
A. Bougie dilation
B. Antibiotics
C. Steroids
D. Colon interposition (via retrosternal route)
E. Esophageal resection with colon interposition

181. What interventions are performed in post-caustic esophageal strictures?
A. Emergency esophageal resection with colon interposition
B. In case of late, tight stricture: esophageal resection with colon interposition
C. If fibrosis is too severe to allow safe esophageal resection, retrosternal colon interposition is performed
D. During endoscopic evaluation: percutaneous endoscopic gastrostomy for nutritional support and retrograde bougie dilation access
E. In case of malignant degeneration of esophageal lesions, retrosternal colon interposition

182. *The surgical stress response results in:
A. Enhanced fibrinolytic activity, predisposing the patient to hemorrhage
B. Suppressed fibrinolytic activity, predisposing the patient to thrombosis
C. Constant fibrinolytic system activity, with no imbalance in coagulation-fluid system
D. Enhanced coagulation activity, predisposing the patient to thrombosis
E. Suppressed coagulation activity, predisposing the patient to haemorrhage

183. *Preoperative measures that reduce the risk of postoperative pulmonary complications include smoking cessation:
A. On the day of the surgery
B. The day before surgery
C. At least 2 weeks before surgery
D. At least 6 weeks before surgery
E. Immediately after surgery

184. *The gold standard for diagnosis and staging of liver disease remains:
A. Liver biopsy
B. Serologic and radiologic tests
C. Abdominal ultrasound
D. Biochemical and serologic tests
E. MRI or CT scan

185. *The main target in perioperative management of a patient with chronic kidney disease (CKD) or acute kidney injury (AKI) is:
A. Accurate monitoring of fluid balance
B. Daily weighing of the patient
C. Avoidance of NSAIDs due to their nephrotoxic side effects
D. Avoidance of opioids, which may accumulate in CKD patients and pose a high risk of respiratory depression
E. Maintaining euvolemia and renal perfusion

186. *Surgical patients with liver pathology:
A. Are at risk of heavy bleeding
B. Are at risk of venous thrombosis
C. Have optimal fluid-coagulation balance
D. Have minimal risk of bleeding
E. Hemostasis impairment may be attributed to increased production of clotting factors

187. *In diabetic patients, surgical stress induces a neuroendocrine response with:
A. Maintenance of the balance between insulin and counter-regulatory hormones: glucagon, adrenaline
B. Cortisol and growth hormone
C. Serum insulin release and decreased blood glucose
D. Decreased counter-regulatory hormones
E. Instability in the balance between insulin and counter-regulatory hormones
F. Release of counter-regulatory hormones, causing peripheral insulin resistance, increased hepatic glucose production, and decreased insulin production, with a tendency toward hyperglycemia

188. *Surgical wound infection:
A. If recognized early, may result in spontaneous drainage
B. Always presents with fever followed by tachycardia
C. Is primarily treated with antibiotics
D. If detected late, may lead to fascial destruction with dehiscence or evisceration
E. Is the most common nosocomial infection

189. Patients with advanced liver pathology are at increased risk of developing ascites, which increases the risk of:
A. Rapid closure of surgical wounds
B. Wound dehiscence
C. Impaired pulmonary ventilation
D. Incisional hernias after abdominal surgery
E. Reaccumulation of ascites, even if drained during surgery

190. In diabetic patients, gastroparesis caused by autonomic neuropathy:
A. Manifests as postprandial hunger
B. May delay gastric emptying and increase aspiration risk
C. Is suggested by a history of prolonged postprandial fullness or constipation
D. Manifests as postprandial diarrhea
E. May be suggested by a gastric splash when the stomach should be empty

191. If surgery is required in a pregnant patient:
A. Ideally, it should be performed in the first trimester
B. Ideally, it should be performed in the second trimester
C. Ideally, it should be performed in the third trimester
D. Laparoscopy can be safely performed by lowering insufflation pressure
E. Laparoscopy can be safely performed by increasing insufflation pressure

192. Gastrointestinal tract tubes include:
A. Nasogastric tubes are usually used for gastric content evacuation
B. Nasogastric tubes are usually used for feeding
C. Nasoenteric tubes are used for feeding
D. Gastrostomy tubes are used for drainage or feeding
E. Jejunostomy tubes are used for long-term nutritional access

193. The position of the nasoenteric feeding tube can be definitively confirmed only by:
A. Careful patient history
B. Clinical examination
C. Intraoperative direct palpation

D. Listening for air injected in the epigastric area
E. X-ray

194. Endotracheal tubes:
A. Have a cuff that ensures a seal with the tracheal wall
B. Come in different diameters that ensure a seal with the tracheal wall
C. Are used when patients require short-term mechanical ventilation
D. Are used when patients require long-term mechanical ventilation
E. Are used when patients cannot maintain a patent airway

195. Chest drainage tubes are placed in the pleural cavity:
A. To evacuate air (hemothorax)
B. To evacuate air (pneumothorax)
C. To evacuate blood (hemothorax)
D. To evacuate fluids (pleural effusion)
E. To evacuate pus (pneumothorax)

196. Chest drainage tubes are connected to a system:
A. Of continuous suction
B. Of continuous insufflation
C. That allows air and fluid drainage from the pleural cavity and prevents air entry from outside into the pleural space
D. Of lavage
E. Of closed-circuit type

197. Tracheostomy tubes:
A. Are placed through the pharynx into the larynx and trachea
B. Are placed directly into the trachea at the neck level
C. Are used in patients requiring short-term mechanical ventilation
D. Are used in patients requiring long-term mechanical ventilation
E. Are used in patients who cannot maintain a long-term patent airway

198. Surgical drains:
A. Are placed intraoperatively to evacuate present fluid collections.
B. Are placed intraoperatively to evacuate potential fluid collections.
C. Passive drains maintain a pathway for fluids to follow.
D. With a closed suction system, they are a two-way route for bacteria.
E. Passive drains, without suction, are a two-way route for bacteria.

199. Wound healing:
A. Occurs by primary or secondary intention.

B. Primary intention means the edges of the wound are approximated using sutures, staples, bands, or dermal adhesives.
C. Secondary intention means the edges of the wound are approximated using sutures, staples, bands, or dermal adhesives.
D. Primary intention implies the edges of the wound were left unapproximated.
E. Secondary intention implies the edges of the wound were left unapproximated.

200. In the treatment of a surgical wound abscess, healing by secondary intention involves:
A. Approximating the wound edges with sutures, staples.
B. The fact that the wound edges were left unapproximated.
C. Approximating the wound edges with bands or dermal adhesives.
D. Applying a dressing to absorb fluids from the wound and prevent premature closure.
E. None of the above statements are true.

201. Pain management for surgical patients:
A. Patients with cranial and cervical incisions benefit from epidural analgesia.
B. Patients with thoracic or abdominal incisions benefit from epidural analgesia.
C. Patient-controlled intravenous analgesia provides good control of intense pain in the immediate postoperative period.
D. Patient-controlled intravenous analgesia provides good control of intense pain in the late postoperative period.
E. In the intensive care unit, oral analgesics are easily administered.

202. Which of the following patients has the highest risk of venous thromboembolism?
A. A patient with gastrointestinal tract surgery.
B. An immobile patient with a spinal fracture.
C. A patient with major thoracic surgery.
D. A patient with a pelvic fracture or long bone fracture.
E. A patient meeting Virchow's triad (stasis, hypercoagulability, and endothelial injury).

203. Postoperative atelectasis:
A. Affects up to 50% of patients undergoing general anesthesia.
B. Affects up to 90% of patients undergoing general anesthesia.
C. Is manifested by an increased shunt fraction, i.e., a low ventilation-perfusion ratio leading to hypoxia.
D. Is manifested by a decreased shunt fraction, i.e., a high ventilation-perfusion ratio leading to increased oxygen saturation.
E. Lung re-expansion is impaired by pain, suppression of coughing, and lack of mobility.

204. Management of postoperative atelectasis:
A. Begins preoperatively, by quitting smoking at least 8 weeks before surgery.

B. Begins preoperatively by initiating inspiratory exercises, especially in patients with productive cough and chronic bronchitis.
C. Begins postoperatively with proper pain management.
D. Continues postoperatively with proper pain management and early mobilization.
E. Minimally invasive surgery significantly reduces the incidence of atelectasis.

205. Acute wound dehiscence or evisceration:
A. Is an acute mechanical complication of the wound.
B. The force exerted transversely on the wound edges exceeds the resistance of the suture material or fascia.
C. The resistance of the fascia is typically impaired by tissue ischemia resulting from excessive tightening of suture threads initially or with the development of tissue edema.
D. Local infection cannot be a causal factor.
E. Deficient suturing technique can be a causal factor.

206. Surgical wound infection:
A. Is the most frequent nosocomial infection.
B. Is the second most frequent nosocomial infection.
C. Occurs in 2-5% of surgical patients.
D. Occurs in 5-10% of surgical patients.
E. Can have acute devastating consequences such as fascial dehiscence, pseudoaneurysm formation, or anastomotic fistula.

207. Signs of surgical wound infection:
A. Are those of inflammation: erythema (rubor), edema (tumor), local warmth (calor), and intense pain at the incision site (dolor).
B. Bradycardia may be the first sign, with fever occurring later.
C. Tachycardia may be the first sign, with fever occurring later.
D. Spontaneous drainage from the surgical wound indicates delayed recognition of this postoperative complication.
E. Late detection leads to fascial destruction, with dehiscence or evisceration.

208. Postoperative fever:
A. Investigation into the cause of fever begins at 38.3°C.
B. Investigations begin with diagnostic tests (laboratory, biological material collection for cultures, and imaging studies).
C. Investigations begin with a targeted physical exam to search for clues and/or confirm a suspected source.
D. Investigations begin with analysis of the circumstances: the location of the patient (in the intensive care unit or surgical ward), hospitalization duration, presence and duration of mechanical ventilation.

E. Of primary importance are instrumentation (catheters, vascular lines, nasal or thoracic probes), medications, surgical wounds, and the nature of the surgical procedure (elective, emergency, gastrointestinal tract, trauma).

209. The error minimization process in surgery includes situations that should never occur, such as:
A. Analysis of circumstances (patient location, hospitalization duration).
B. Surgery performed on the wrong side of the body.
C. Imaging investigations.
D. Performing a targeted physical examination.
E. Surgery performed on the wrong patient.

210. Cervical esophageal perforation will benefit from the following treatments:
A. Antibiotic per os
B. Surgical debridement
C. Upper digestive endoscopy
D. Intravenous antibiotics
E. Feeding gastrostomy

211. *The following statements about thoracic esophageal perforations are true, except:
A. Major perforation of the thoracic esophagus usually presents with acute signs of sepsis
B. Per perforation of the thoracic esophagus is the most common consequence of a healthy anterior esophagus
C. Mallory-Weiss syndrome is characterized by upper gastrointestinal bleeding
D. Investigation of suspected thoracic esophageal perforation begins with a standard chest X-ray
E. Basic treatment is surgery

212. Thoracic esophageal perforation includes the following steps:
A. Thorough debridement of infected tissues
B. Single-layer esophagogastritis of the lining only
C. Strengthening the suture with a pedicled intercostal flap
D. Concomitant esophagectomy for achalasia
E. T-tube drainage for end-stage esophageal cancer

213. The classification of hiatal hernias includes the following types of conditions:
A. Type III, the most common form
B. Type I, by sliding

C. Type IV is a combination of a sliding and paraesophageal hernia
D. In type II there is an isolated prolapse of the stomach through a weakened esophageal brake ligament
E. Type I is commonly associated with gastroesophageal reflux disease

214. The following statements about hiatal hernia management are true:
A. Type I hiatal hernias will always require surgical treatment
B. Acute incarceration is rare in type II
C. A key intraoperative step is the tension-free closure of the diaphragmatic defect
D. In elderly, chronically treatable patients, laparoscopic treatment of hiatal hernia with simple stomach reduction and gastropexy is often sufficient
E. Surgical treatment of any type of hiatal hernia is usually indicated when symptoms are present

215. *Key operative steps in the surgical treatment of hiatal hernias include the following, except:
A. Stomach fundoplication
B. Complete reduction of the hernia sac
C. Tension-free closure of diaphragmatic defect
D. Concomitant longitudinal gastrectomy
E. Mobilizing the thoracic esophagus to achieve an intra-abdominal esophageal length of 2-3 cm

216. The following statements about Hemophilia A are true:
A. Factor X activity is reduced or absent
B. It is an autosomal-dominant disease
C. Rare in females
D. Localization of bleeding is at joint and intramuscular level
E. aPTT is extended

217. The following may be causes of acquired clotting disorder:
A. Uremia
B. Platelet inhibitor medication
C. Over-the-counter herbal supplements
D. Administration of KCl 7.4% intravenously
E. Liver steatosis

218. The following laboratory tests are used to monitor treatment with unfractionated heparin:
A. Thrombin time
B. INR
C. aPTT

D. Prothrombin time
E. Anti-Xa activity

219. Factors that predict the need for massive transfusion in a patient with active bleeding include:
A. Heart rate ≥ 120 beats/minute
B. FAST negative in the presence of a penetrating wound
C. FAST positive in the presence of a penetrating wound
D. Systolic blood pressure≤≤90mmHg
E. Cranial bleeding

220. The following statements about massive transfusion protocols and their adjuvants are true:
A. Extra calcium should be given every 4 units of red blood cell mass
B. The optimal ratio of plasma, platelets and MER is 2:1:1
C. Tranexamic acid is useful in the first 3 hours by inhibiting fibrinolysis
D. Recombinant factor VIIa promotes coagulation but does not significantly benefit mortality
E. The optimal ratio of plasma, platelets and MER is 1:1:1:2

221. The following can be causes of postoperative bleeding:
A. Extensive hepatectomies
B. Insufficient postoperative nutrition and receiving
C. Severe infections with shock
D. Taking vitamin K
E. Disseminated intravascular coagulation

222. The following laboratory samples may be useful in the positive diagnosis of disseminated intravascular alcoholism:
A. Troponin T
B. Low D-dimers
C. Thrombocytopenia
D. aPTT extended
E. Hyperfibrinogenemia

223. *Post-operative bleeding may occur in the following situations:
A. Disseminated intravascular coagulation
B. Brain surgery
C. α2-antiplasmin deficiency
D. Prostate surgery
E. All of the above

224. The following subgroups of patients may frequently have bleeding disorders or procoagulant states:
   A. Patients with chronic lung diseases
   B. Pregnant women
   C. Children and teenagers
   D. Elders
   E. Patients with liver failure

225. Regarding red blood cell mass (RBC) bags for transfusion, the following statements are not true:
   A. The volume of a bag of MER is 500 ml of which 310 ml are erythrocytes
   B. MER bags do not contain plasma
   C. Transfusing a bag of SRM into a 70 kg patient increases hematocrit by 3%
   D. Transfusing a bag of MER into a 70-kg patient increases hemoglobin concentration by 1g/dL
   E. MER bags are typically stored at 1-6°C.

226. Transfusions of fresh frozen plasma in patients who are about to undergo surgery or are bleeding manifestly are indicated in the following situations:
   A. PT or aPTT abnormally increased
   B. Absolute thrombocytopenia
   C. Pre-operative treatment with clopidogrel (Plavix).
   D. Pre-operative treatment with Warfarin
   E. Pre-operative treatment with Aspirin

227. *Acidosis and coagulopathy the next element is part of the lethal triad:
   A. Hypoglycemia
   B. Hyperglycemia
   C. Hyperthermia
   D. Hypothermia
   E. Acute kidney failure

228. The following are transfusion-immunologic reactions:
   A. Febrile reactions
   B. Thrombocytopenia
   C. Anaphylactic shock
   D. Acute and delayed hemolytic reactions,
   E. Thrombocytosis

229. The following statements about thrombocyte mass transfusion are false:
   A. It is indicated for patients with clinically manifest bleeding in association with absolute thrombocytopenia
   B. It is indicated for patients with clinically manifest bleeding in association with relative thrombocytopenia but with platelet dysfunction
   C. With a typical transfusion of 6 units of thrombocyte mass, an increase in platelets of approximately 10,000-20,000 platelets/μL is expected.
   D. The therapeutic effect of thrombocyte mass transfusion depends on the weight of the patient and the number of concentrates transfused
   E. With a typical transfusion of 4 units of thrombocyte mass, an increase in platelets of approximately 200,000 platelets/μL is expected.

230. * Acute lung injury in the context of a transfusion reaction consists of:
   A. Cardiogenic pulmonary edema
   B. Acute bronchopneumonia
   C. Spontaneous pneumothorax
   D. Noncardiogenic pulmonary edema
   E. Acute pulmonary infarction

231. * Management of minor transfusion reactions consists of
   A. Stop transfusion immediately
   B. Administration of crystalloids for hemodilution of transfused components
   C. Antihistamines
   D. Mannitol
   E. None of the above

232. *The most common indication for small bowel surgery is:
   A. Traumatic intestinal perforation
   B. Thrombosis of the superior mesenteric vein
   C. Small bowel obstruction
   D. SARS-COV 2 infection
   E. Enterocolitis caused by Clostridium Difficile

233. Etiologies of small bowel occlusion include:
   A. Severe abdominal trauma
   B. Extrinsic causes
   C. Infectious causes
   D. Intrinsic causes
   E. Intraluminal causes

234. The intrinsic causes of small bowel obstruction are characterized by:

A. Ulcers associated with chronic use of non-steroidal anti-inflammatory drugs
B. Intestinal wall thickening
C. Most benign strictures can be resolved non-surgically
D. The most common causes are post-radiotherapy enteritis and anastomotic strictures
E. Although the passage of liquids is not restricted, solid or undigested particles may not be able to pass through the narrowed lumen.

235. The extrinsic causes of small bowel obstruction (SBO) are characterized by:
A. Laparoscopic procedures produce about 80% more adhesions than open procedures
B. Postoperative adhesions are present in at least two-thirds of patients who have had abdominal surgery
C. In general, 3-9% of patients who have undergone abdominal surgery in the past may subsequently present with OIS-associated symptoms
D. In industrialized countries, postoperative adhesions or scar tissue are the most common causes of OIS
E. Crohn's disease is an extrinsic cause of OIS

236. The following pathologies can cause small bowel obstruction of extrinsic cause, except:
A. Invagination
B. Carcinomatosis
C. Gastrointestinal stromal tumors
D. Internal hernias
E. Superior mesenteric artery syndrome

237. The following pathologies can cause intraluminal small bowel obstruction:
A. Phytobezoars
B. Inguinal hernias
C. Inavagination
D. Anastomotic strictures
E. Biliary Ileus

238. The pathophysiology behind small bowel occlusions (SBO) consists of:
A. Fluid losses also occur through the 'third space'
B. In extremely proximal OIS, the intestinal juice is very acidic and vomiting leads to metabolic alkalosis
C. Dehydration occurs mainly as a consequence of watery diarrhea
D. Over time, potassium losses increase, so the cerebrospinal secretes potassium along with bicarbonate as a compensatory mechanism
E. The absorption of sodium, potassium, chlorine and hydrogen ions is significantly increased

239. * Dehydration in small bowel occlusions occurs as a consequence of, except:
   A. Vomiting
   B. Low wall absorption
   C. Decreased secretion hormonally stimulated by lumen distesia
   D. Fluid oozing into the peritoneal cavity
   E. Third-space losses due to abdominal wall edema

240. Indicators of a high risk of strangulation are:
   A. Fever
   B. Thrombocytosis
   C. Leukopenia
   D. Abdominal tenderness
   E. Tachycardia

241. The following signs and symptoms match the location and type of affected loop:
   A. Frequent heavy and bilious vomiting occurs in occlusions with open proximal bowel loop
   B. Fecal-like vomiting in closed loop occlusions
   C. Pain from colon and rectal occlusions are continuous
   D. Sensitivity to epigastric palpation occurs in closed loop occlusions
   E. Distension in occlusions with open proximal intestinal loop is marked

242. *Examination of the patient with small bowel obstruction may reveal the following except:
   A. The abdomen is frequently distended, depending on the location of the occlusion.
   B. Surgical scars and potential herniation areas should be carefully examined
   C. On auscultation, in the early stages of the disease, high-pitched sounds and borborism can be detected
   D. Tachycardia, dry mucous membranes, decreased skin turgor and relative hypotension may be seen in early cases
   E. Sensitivity to percussion, decompression and teamade movement, require emergency surgical intervention

243. Radiologic features suggestive of small bowel obstruction include:
   A. Intestinal distension proximal to the point of occlusion
   B. Pneumobilia
   C. Airport
   D. Water levels can be seen on orthostatic images
   E. Distal bowel collaboration

244. Regarding CT investigation in small bowel occlusions (SBO), the following statements are true:
   A. CT results are always correlated with the clinical picture
   B. The rotation of the mesentery seen on CT is called the 'vortex sign'
   C. CT is only helpful if oral contrast is administered
   D. Small bowel contrast investigations are always necessary in acute conditions
   E. CT can identify the transition zone between the dilated and non-dilated portion of the small intestine

245. *The laboratory examinations in small bowel occlusion can be stated, except:
   A. A hyperkalemic "shrinking" alkalosis is common in patients with severe dehydration
   B. Hyperamylasemia may be seen in OIS
   C. Persistent leukocytosis may be a sign of progression to ischemia
   D. A constitutive heart attack can be clinically present without acidosis
   E. Lactic acidosis, especially in the context of adequate volemic resuscitation, may signal intestinal ischemia

246. *From the following statements about the esophagus, select the false one:
   A. The esophagus passes through the thorax into the posterior mediastinum
   B. The descending thoracic aorta is in the anterior part of the esophagus
   C. The surgical approach to the esophagus is most often performed through a right thoracotomy
   D. The cervical esophagus is supplied by the inferior thyroid artery
   E. The azygos and hemiazygos veins provide venous drainage of the thoracic esophagus

247. *In hepatic cirrhosis with portal venous hypertension (and possible esophageal varices), collateral drainage between the portal venous system and the azygos veins is provided by:
   A. Inferior thyroid vein
   B. Splenic vein
   C. Right gastric vein
   D. Inferior esophageal venous plexus
   E. Liver veins

248. Choose the true statements about lymphatic drainage of the esophagus:
   A. The thoracic esophagus drains into lymph nodes in the anterior mediastinum
   B. In esophageal carcinoma, the initial metastasis to the lymph nodes is determined by the location of the tumor
   C. Lymph vessels of the cervical esophagus drain into the deep cervical (jugular) lymph nodes
   D. The cervical esophagus drains into the axillary lymph nodes
   E. The distal esophagus drains into the celiac, left gastric and parahiatal lymph nodes

249. Which of the following statements about the innervation of the esophagus is false?
   A. The proximal esophagus is innervated by the vagus nerve via the recurrent laryngeal nerves and the thoracic sympathetic chain
   B. Recurrent laryngeal nerve injury disrupts the swallowing mechanism of the upper esophagus
   C. Recurrent laryngeal nerve damage disrupts vocal cord activity
   D. Myenteric plexus injury can cause heartburn
   E. Parasympathetic fibers in the muscularis propria form the myenteric plexus, responsible for innervation of the middle and distal esophagus

250. Which of the following statements about the esophagus is true?
   A. Connects the oral cavity to the stomach
   B. It is a muscular food tube about 25 cm long
   C. Starts about 15 cm from the dental arch
   D. Crosses the thorax into the anterior mediastinum
   E. The aorta is located on the left side of the esophagus and then crosses the diaphragm posterior to it

251. Regarding the anatomy of the esophagus, the following statements are true:
   A. The descending thoracic aorta is in the anterior part of the esophagus
   B. Recurrent laryngeal nerve injury disrupts the swallowing mechanism of the upper esophagus
   C. Lymph vessels of the cervical esophagus drain into the deep cervical (jugular) lymph nodes
   D. The esophagus is a muscular food tube about 25cm long that connects the pharynx to the stomach
   E. The venous drainage of the cervical esophagus is mainly provided by the inferior thyroid vein

252. What are the histologic types of esophageal cancer?
   A. Mucinous carcinoma
   B. Pitted cell tumor
   C. Adenocarcinoma
   D. Small cell esophageal cancer
   E. Squamous cell carcinoma

253. Choose the true statements about squamous cell carcinoma (SCC) of the esophagus:
   A. There is a higher incidence in women
   B. It is mainly located in the middle and proximal third of the esophagus

C. One of the factors blamed for increasing the risk of CSC is high dietary intake of nitrosamine
D. There is a strong association between smoking (tobacco) and CSC
E. No association between alcohol consumption and CSC could be demonstrated

254. *Choose the incorrect option for esophageal carcinoma:
A. The annual incidence is 4-5 per 100,000
B. Overall survival at 5 years is about 20%
C. There is a strong association between smoking (tobacco) and squamous cell carcinoma
D. Squamous cell carcinoma is mainly located in the distal third of the esophagus
E. The incidence of esophageal adenocarcinoma has surpassed that of squamous cell carcinoma

255. Choose the true statements about esophageal adenocarcinoma:
A. He has an unfavorable prognosis
B. It has surpassed squamous cell carcinoma in incidence
C. Its prevalence is higher in the African-American population
D. Adenocarcinoma involves the distal esophagus and is associated with Barrett's esophagus
E. Annual incidence is 8-9 per 100,000

256. Which of the following is true about the clinical picture of esophageal cancer?
A. Esophageal adenocarcinoma causes food dysphagia
B. Carci squamo-cellular nom causes weight loss
C. At the time of diagnosis, adenocarcinoma patients are often at a less advanced stage of disease
D. Squamous-cell carcinoma is commonly associated with unhistoric reflux disease
E. Esophageal adenocarcinoma causes weight loss

257. *Which of the following is false about the diagnosis of esophageal cancer?
A. The barite cross usually confirms esophageal stenosis in the form of an irregular filling defect
B. Computed tomography can be useful in defining tumor extent
C. Endoscopic evaluation is mandatory to obtain histologic confirmation of esophageal cancer
D. Computed tomography cannot identify pathologic lymph nodes
E. Apart from periesophageal lymph nodes, the organs most commonly involved in metastatic disease are the liver and lungs

258. Which of the following is true about the diagnosis of esophageal cancer?
   A. Paraclinical evaluation for suspected esophageal cancer is mainly intended to confirm the diagnosis and staging
   B. In patients with Barrett's dysplasia, endoscopic surveillance with routine biopsies helps to identify early malignant changes
   C. Apart from the periesophageal lymph nodes, the organs most commonly involved in metastatic disease are the lungs and bones
   D. CT is not sufficient as a single investigation to prove tumor invasion into adjacent structures
   E. The barite cross usually confirms esophageal stenosis in the form of an irregular filling defect

259. In staging esophageal cancer, the following statements are true:
   A. In stage II or earlier the lymph nodes are not affected
   B. Tumor localization is used to stage esophageal adenocarcinoma
   C. The same classification is currently used for staging squamous cell carcinoma and esophageal adenocarcinoma
   D. For early stages, 5-year survival is 50% or higher
   E. For stages IIa or earlier, there is limited local invasion of the tumor

260. Which of the following statements is false about the surgical treatment of esophageal cancer?
   A. Surgical resection remains the best way to cure
   B. the long-term outcome after attempted resective treatment remains unfavorable
   C. Surgical treatment is based on the principle of radical local resection of the tumor
   D. Most studies report an overall 5-year survival rate of 40%.
   E. Post-resection alimentary tract reconstruction is generally done using synthetic prostheses

261. After esophageal resection for esophageal cancer, reconstruction of the digestive tract is necessary. Which of the following are not used as esophageal substitutes?
   A. Stomach
   B. Duoden
   C. Rect
   D. Jejun
   E. Colon

262. *After esophageal resection for esophageal cancer, reconstruction of the digestive tract is necessary. If the stomach is used as a graft for esophageal reconstruction, which of the following vessels are transected?
   A. Left gastric artery

B. Right gastric artery
C. Gastro-duodenal artery
D. Left gastro-epiploic artery
E. Splenic artery

263. * Which of the following is not a palliative treatment method for esophageal cancer?
A. Endoscopic dilation
B. Laser and photodynamic therapy
C. Radiotherapy and radiochemotherapy
D. Surgical resection of the tumor
E. Esophageal stents

264. About the surgical techniques used for esophageal resection for esophageal cancer, the following are true:
A. Resection can be performed by thoracotomy
B. The transthoracic approach offers the possibility of a more extensive and direct resection of the tumor
C. The resection can be performed by transhiatal approach
D. Thoracotomy approach may offer significant advantages in patients with impaired lung function
E. Thoracotomy is often associated with higher morbidity than an abdominal incision

265. Which of the following is true about neoadjuvant therapy for esophageal cancer?
A. Most protocols recommend the use of 5-tluorouracil and cisplatin
B. Surgical resection is recommended to be performed 1 month after completion of neoadjuvant treatment
C. The use of neoadjuvant therapy has not shown an improvement in survival compared to surgical resection as the sole treatment method
D. The greatest survival benefit occurs in patients who demonstrate a complete response to neoadjuvant therapy
E. External radiation of 45 Gy over 6-7 weeks is recommended

266. Diseases affecting the pancreas are common and include processes that can affect both endocrine and exocrine functions:
A. Congenital
B. Noninflammatory
C. Infectious
D. Atraumatic
E. Neoplasia

267. Pancreas:

A. It is an intraperitoneal organ
B. Divided into three distinct parts: head, body and tail
C. The pancreatic head is enclosed by the duodenal horseshoe
D. The superior mesenteric vein (VMS) marks the junction between the head and body of the gland
E. The tail represents the most distal portion of the gland and extends towards the hilum of the spleen, on which it sometimes rests.

268. Celiac trunk:
A. Vascularizes the proenteron
B. Vascularizes the mesenteron
C. Vascularizes the metenteron
D. Vascularizes the mesenteron simenteron
E. It bifurcates into the left gastric artery, the splenic artery and the common hepatic artery

269. Celiac trunk:
A. It bifurcates into the left gastric artery and the common hepatic artery
B. It bifurcates into the splenic artery and the common hepatic artery
C. It bifurcates into the left gastric artery, the splenic artery and the common hepatic artery
D. It bifurcates into the right gastric artery, the splenic artery and the common hepatic artery
E. It vascularizes the pancreatic head and duodenum via the gastroduodenal artery (GAD)

270. Superior mesenteric artery:
A. It fully vascularizes the proenteron
B. It completely vascularizes the mesentery
C. It completely vascularizes the metenteron
D. It arises from the anterior wall of the abdominal aorta
E. It arises from the posterior wall of the abdominal aorta

271. Superior mesenteric artery:
A. It arises from the posterior wall of the abdominal aorta
B. It is located immediately anterior to the pancreas
C. Its first branch is represented by the inferior pancreatico-duodenal artery
D. It vascularizes the entire small intestine, the right colon and the transverse colon
E. It vascularizes the entire small intestine, the left colon and the transverse colon

272. Collaterals of the celiac trunk and superior mesenteric artery:

A. Although a large number of patients develop a significant stenosis of the celiac trunk, most of them do not show symptoms of chronic mesenteric ischemia, due to a vast and rich network of collateral vessels, which connect the celiac trunk to the superior mesenteric artery.
B. Although a large number of patients develop a significant stenosis of the celiac trunk, most of them present symptoms of chronic mesenteric ischemia, due to a weak network of collateral vessels, which connect the celiac trunk to the superior mesenteric artery.
C. The most common collateral networks associated with the celiac trunk and the superior mesenteric artery, which surround the pancreas and duodenum, involve the gastroduodenal vessels
D. The dorsal pancreatic artery can have different origins and has the role of interconnecting the celiac trunk and the superior mesenteric artery in several places
E. The frontal pancreatic artery can have different origins and has the role of interconnecting the celiac trunk and the superior mesenteric artery in several places

273. Venous drainage of the pancreas:
A. Corresponds to the arterial vasculature
B. It is different from arterial vasculature
C. At the level of the pancreatic body and tail, it is done through the tributary branches of the splenic vein and the inferior pancreatic veins
D. At the level of the pancreatic body and tail, it is done through the tributary branches of the splenic vein and superior pancreatic veins
E. The superior mesenteric vein can join the portal system at any level along the splenic vein

274. Innervation of the pancreas:
A. Sympathetic innervation (vagus nerve)
B. Parasympathetic innervation (greater splanchnic nerve)
C. Sensory signals indicative of pancreatic pain are transmitted through the fibers related autonomic sensory nerves
D. Pancreatic pain can be the consequence of neoplastic infiltration, inflammatory processes or ductal obstruction
E. Treatment of mild pain in patients with acute pancreatitis may involve unblocking the afferent nerves, through neurolysis of the celiac plexus, using alcohol or other neurolytic substances.

275. Exocrine function of the pancreas:
A. The pancreas plays an important role in digestion and secretes daily 1500-1800 mL of isotonic alkaline fluid, which contains electrolytes and digestive enzymes
B. Sodium and potassium concentrations are higher than those in plasma

C. Chlorine concentration varies in direct proportion to bicarbonate secretion
D. When gastric acid contents (pH <3) enter the duodenum, the duodenal mucosa releases secretin, which stimulates the pancreas to secrete increased amounts of bicarbonate-rich fluid (pH >8)
E. Cholecystokinin (CCK) also weakly stimulates bicarbonate production

276. Endocrine function of the pancreas: The islets of Langerhans are populated with a wide variety of cell lines that produce different peptide hormones, except**:**
A. TSH
B. T3
C. somatostatin,
D. Pancreastatina
E. VIP

277. Etiology of acute pancreatitis:
A. Alcohol consumption and gallstones are responsible for approximately 25% of acute pancreatitis cases
B. genetic
C. mechanical
D. Autoimmune
E. Vascular

278. In patients with post-ethanol pancreatitis, the following statements are correct except:
A. The first episode of pancreatitis is preceded by 3-4 years of moderate alcohol consumption.
B. These patients usually present with recurrent episodes of pancreatitis that are frequently related to continuous alcohol consumption
C. After the first episode of acute pancreatitis, the pancreatic ductal system permanently deteriorates and determines the development of chronic pancreatitis
D. Alcohol can cause the precipitation of secretions with high protein content, leading to blockage of small pancreatic ducts
E. The mechanisms by which hyperlipidemia, hypercalcemia, and drugs such as corticosteroids, thiazide diuretics, furosemide, estrogens, and azathioprine favor the onset of the disease are unknown.

279. The mechanical causes of acute pancreatitis are, except:
A. Parasitic diseases
B. Kidney stones
C. Tumors
D. injuries
E. alcohol

280. Defining the degrees of severity of acute pancreatitis. Peri-pancreatic local complications of acute pancreatitis - Acute Pseudocyst:
   A. Collection of pancreatic juice surrounded by a wall of fibrous granulation tissue,
   B. Collection of pancreatic juice without its own wall
   C. Which occurs as a result of pancreatic trauma
   D. Which occurs as a result of chronic pancreatitis
   E. Which appears as a result of repeated alcohol consumption

281. Defining the degrees of severity of acute pancreatitis. Peri-pancreatic local complications of acute pancreatitis - Acute Pseudocyst:
   A. Appeared at least 6 months after the onset of symptoms
   B. It is round or ovoid
   C. Most often with purulent content
   D. Which occurs as a result of acute pancreatitis
   E. Which occurs as a result of gallstones

282. Defining the degrees of severity of acute pancreatitis. Peri-pancreatic local complications of acute pancreatitis - Pancreatic abscess:
   A. Circumscribed intra-abdominal purulent collection
   B. usually in the vicinity of the pancreas
   C. with extensive pancreatic necrosis
   D. occurs as a consequence of acute pancreatitis or pancreatic trauma
   E. often occurs more than 12 months after onset

283. Etiological factors of acute pancreatitis. Metabolic:
   A. alcohol
   B. hyperlipidemia
   C. hypertriglyceridemia
   D. hypercalcemia (hyperparathyroidism)
   E. Autoimmune pancreatitis

284. Etiological factors of acute pancreatitis. Metabolic:
   A. Gallstones
   B. ERCP
   C. Uremia
   D. Pregnancy
   E. Scorpion venom

285. Etiological factors of acute pancreatitis. Metabolic, except:
   A. Gallstones

B. alcohol,
C. split pancreas
D. hyperlipidemia,
E. hypertriglyceridemia

286. Etiological factors of acute pancreatitis. Mechanics:
A. Hyperlipidemia
B. Pancreas divided
C. Ductal obstruction (ascariasis, tumors, etc.)
D. Autoimmune pancreatitis
E. ERCP

287. Etiological factors of acute pancreatitis. Mechanics, except:
A. Gallstones,
B. Scorpion venom
C. Lupus erythematosus
D. Ductal obstruction (ascariasis, tumors, etc.)
E. Medicines

288. Etiological factors of acute pancreatitis. Mechanical, except:
A. duodenal obstruction,
B. Ductal obstruction by fibrosis due to previous episodes of pancreatitis,
C. Dysfunction of the sphincter of Oddi
D. Pregnancy
E. Medicines

289. The differential diagnosis of acute pancreatitis includes:
A. Acute cholecystitis
B. Uncomplicated peptic ulcer
C. Acute mesenteric ischemia
D. Esophageal perforation
E. Myocardial infarction

290. The differential diagnosis of acute pancreatitis includes, except:
A. Gallstones
B. Uncomplicated peptic ulcer
C. Acute mesenteric ischemia,
D. Esophageal perforation
E. Myocardial infarction

291. Diseases affecting the pancreas include processes:

A. Congenital
B. inflammatory
C. Infectious
D. neoplasia
E. Extradural

292. The pancreas is made up of the following anatomical components:
A. Head
B. Neck
C. Isthmus
D. Body
E. Tail

293. Pancreatic tumors are:
A. Malign
B. Premaligne
C. Benign
D. Extracapsulare
E. Intracapsulare

294. Examples of malignant pancreatic tumors include the following:
A. Adenocarcinoma
B. Lymphoma
C. Adenoma mucinos
D. Cystic mucinous neoplasm
E. Simple cyst

295. Examples of premalignant pancreatic tumors are as follows:
A. Pseudopapillary solid neoplasm
B. Pseudochist
C. Lymphoma
D. Mucinous adenoma
E. Metastatic tumors

296. *Most patients with pancreatic tumors have unresectable disease and have an average survival of approximately:
A. 2 months
B. 12 months
C. 6 months
D. 3 years
E. 5 years

297. Pancreatic neuroendocrine tumors (NPN) are classified as follows:
   A. functional
   B. nonfunctional
   C. Extra-functional
   D. Hyperfunctional
   E. Hypofunctional

298. Malignant neuroendocrine pancreatic tumors are represented by the following examples:
   A. Gastrinomas
   B. Glucagonomas
   C. Insulinomas
   D. Dysfunctional islet cells
   E. Lipomas

299. The following gene or growth factor mutations are implicated in pancreatic cancer:
   A. p53
   B. p16
   C. APC
   D. DCC
   E. r29

300. Benign pancreatic tumors are represented by:
   A. Pseudochyst
   B. Simple cyst
   C. Serous cystadenoma
   D. Lymphoma
   E. IPMN

301. Somatostatinomas can occur in:
   A. Pancreas
   B. Duodenum
   C. Jejunum
   D. Oral cavity
   E. Rectum

302. *Acute pancreatitis occurs due to cell damage:
   A. Apical
   B. Dermal
   C. Acinare
   D. Stromale

E. Epidermal

303. *The following statements are true about acute pancreatitis:
A. Alcohol consumption and gallstones are responsible for approximately 85% of acute pancreatitis cases
B. Alcohol consumption and gallstones are responsible for approximately 55% of acute pancreatitis cases
C. Alcohol consumption and gallstones are responsible for approximately 95% of acute pancreatitis cases
D. Alcohol consumption and gallstones are responsible for approximately 25% of acute pancreatitis cases
E. Alcohol consumption and gallstones are responsible for approximately 15% of acute pancreatitis cases

304. *Local peripancreatic complications of acute pancreatitis include:
A. Pancreatic necrosis
B. Severe mitral regurgitation
C. Perforation of the sigmoid colon
D. Acute appendicitis
E. Myocardial infarction

305. *The vascular etiological factors of acute pancreatitis are:
A. Periarteritis nodosa
B. Autoimmune pancreatitis
C. Gallstones
D. Mumps
E. Alcohol

306. *The differential diagnosis of acute pancreatitis includes:
A. Chronic cholecystitis
B. Rupture of the spleen
C. Acute mesenteric ischemia
D. Acute appendicitis
E. Crohn's disease

307. *Pancreatic necrosis in acute pancreatitis occurs at approximately:
A. 90% of patients
B. 80% of patients
C. 20% of patients
D. 10% of patients
E. 50% of patients

308. *The following statement about chronic pancreatitis is true:
   A. Glandular destruction is no longer reversible
   B. The most common symptom is acute pain
   C. Eating often does not make the pain worse
   D. Alcohol consumption is responsible for about 50% of cases of chronic pancreatitis
   E. May cause chronic cough

309. *The following statement is true:
   A. The most frequent complication of acute pancreatitis is represented by the development of a peripancreatic fluid collection
   B. Patients with peripancreatic collections are not at risk of developing complications
   C. Most of the peripancreatic collections do not resorb spontaneously
   D. Peripancreatic collections that persist cannot develop into a pancreatic pseudocyst
   E. Chronic pancreatitis does not require drug treatment

310. *Diseases in which hyperamylasemia occurs:
   A. Lung cancer
   B. Intestinal ischemia
   C. Ectopic pregnancy
   D. Renal failure
   E. All of the above

311. *Computed tomography staging in acute pancreatitis grade C describes:
   A. Single peripancreatic fluid collection
   B. Pancreas normal
   C. Inflammation of the pancreas and/or peripancreatic fat
   D. Unviewable pancreas
   E. Hemorrhagic shock

312. *The adult spleen weighs:
   A. 100-500 g
   B. 75-150 g
   C. 200 g
   D. 50 g
   E. 750 g

313. *Spleen receives approximately what percent of cardiac output?
   A. 5 %
   B. 10%
   C. 20%

D. 30%
E. 25%

314. *Is the spleen the largest source of immunoglobulin?
A. IgM
B. IgG
C. IgE
D. IgA
E. IgH

315. Indications for splenectomy are:
A. Trauma
B. Hereditary spherocytosis
C. Iatrogenic injury
D. Acute appendicitis
E. Hemolytic anemia

316. The classification of splenomegaly, according to dimensional growth, can be:
A. Small
B. Moderate
C. Large
D. Giant
E. Negligible

317. In the classification of splenomegaly, the moderate form appears in?
A. Scurvy
B. Hepatitis
C. Amyloidosis
D. Typhoid fever
E. Gaucher disease

318. In the classification of splenomegaly, the large form occurs in?
A. Acute malaria
B. Chronic malaria
C. Myelofibrosis
D. Gaucher disease
E. Pernicious anemia

319. Hypersplenism is characterized by:
A. Anemia
B. Leukopenia

C. Thrombocytopenia
D. Acute diarrheal syndrome
E. Hyperphagia

320. The following are pathologies associated with hypersplenism:
A. Portal hypertension
B. Splenic vein thrombosis
C. Acute appendicitis
D. Sarcoidosis
E. Sindrom Felty

321. Postsplenectomy complications include:
A. Persistent bleeding
B. Left pulmonary atelectasis
C. Left pleurisy
D. Right pleurisy
E. Pancreatic lesions

322. Abnormalities of splenic function are classified as:
A. Functional
B. Atypical
C. Anatomical
D. Subtypical
E. Extracapsular

323. *Which of the following statements characterizes grade III traumatic liver injuries?
A. Expansive subcapsular hematoma, less than 10% of the surface
B. Non-expansive subcapsular hematoma, less than 10% of the surface
C. Capsular tear, with bleeding, 1-3 cm deep and less than 10 cm in length
D. Capsular tear, without bleeding, less than 1 cm in depth
E. Tear more than 3cm deep in the parenchyma

324. *Which of the following is the main indication for surgical intervention in liver trauma?
A. Visualization of intraperitoneal effusion on abdominal ultrasound
B. Visualization of an area of hepatic contusion on CT examination
C. Hemodynamic instability
D. Demonstration of hemorrhage by extravasation of contrast material on CT examination
E. Highlighting a non-expansive subcapsular hematoma, less than 10% of the surface

325. Which of the following statements regarding the classification of traumatic liver injuries are true?
   A. Grade VI liver injuries are represented by liver avulsion
   B. Grade V liver injuries include parenchymal tears involving >3 segments of the same lobe
   C. Grade IV liver injuries include intraparenchymal hematomas >10 cm or expanding
   D. Grade III liver injuries include ruptured subcapsular hematomas with active bleeding
   E. Grade II liver lesions include lacerations > 3 cm deep in the parenchyma

326. Which of the following are imaging modalities of choice used in the diagnosis of traumatic liver injury?
   A. Cholangiography
   B. Ultrasonographic evaluation in trauma
   C. Magnetic resonance
   D. Standard ultrasound
   E. Computed Tomography (CT)

327. Grade IV liver injuries are represented by:
   A. Subcapsular, >50% of the surface or expanding
   B. Subcapsular, non-expansive, 10-50% of the surface
   C. Ruptured intraparenchymal hematoma with active bleeding
   D. Parenchymal rupture involving >75% of the liver lobe
   E. Parenchymal rupture involving 25-75% of the liver lobe

328. Grade II liver injuries are represented by:
   A. Subcapsular hematoma, non-expansive, 10-50% of the surface
   B. Intraparenchymal hematoma, nonexpansive, <10 cm in diameter
   C. Subcapsular hematoma, non-expansive, < 10% of the surface
   D. Capsular rupture, active bleeding 1-3 cm deep into parenchyma, < 10 cm in length
   E. Juxtahepatic venous lesions

329. *The following statement about liver tumors is not true:
   A. Hepatic cavernous hemangioma is the most common benign liver tumor
   B. Hepatocellular carcinoma (HCC), or hepatoma, accounts for 90% of primary malignant liver tumors
   C. Focal nodular hyperplasia (NFH) should be treated conservatively when the diagnosis has been established by imaging
   D. In the case of hepatic hemangiomas, most patients are symptomatic at presentation
   E. Most patients with liver adenoma have a history of exposure to estrogen hormones

330. *Which statement about liver cysts is false?

A. Liver cysts can be congenital or acquired
B. Cystic tumors are usually single, bulky formations
C. Most simple hepatic cysts communicate with the biliary tree
D. Cystadenomas tend to recur
E. Cystadenomas have the potential for malignant transformation

331. *The following statements about liver abscesses are true except:
A. Patients with bacterial liver abscess complain of fever
B. Liver abscess is in most cases secondary to an infection of the digestive tract
C. Amoebic abscess is common in regions where amebiasis is endemic
D. The pyogenic abscess shows a well-vascularized wall at CT
E. Most patients with pyogenic liver abscess do not show changes in blood tests

332. *The following statements about liver tumors are true except:
A. Hepatocellular carcinoma represents 90% of primary malignant tumors of the liver
B. The main site of metastasis of hepatocellular carcinoma is represented by the peritoneum
C. The most common malignant tumors identified in the liver are metastatic tumors
D. In cholangiocarcinoma, there is often no visible tumor on CT
E. Peripheral cholangiocarcinoma can be asymptomatic

333. The following statements about liver tumors are true:
A. Cholangiocarcinoma is formed from the mucosa of the biliary tree
B. Liver transplantation is not an option for patients with hepatocellular carcinoma
C. Complications with adenomas occur more frequently in women using long-term oral contraceptives
D. In focal nodular hyperplasia, liver function is affected
E. Hepatic hemangioma is 5 times more common in men

334. Which statements about hepatic hydatid cyst are not true?
A. Man is an intermediate host
B. Humans become infected by coming into contact with dog feces
C. Percutaneous aspiration or biopsy are indicated for diagnostic purposes
D. Erosion and rupture of the bronchial tree is a possible complication
E. The hydatid cyst results from the parasitic infection of humans with Taenia solium

335. Which of the following statements about hepatocellular carcinoma (HCC) is true?
A. It usually occurs in patients with chronic liver disease
B. Treatment depends on the size and extent of the chronic liver disease
C. It has a susceptibility for vascular invasion

D. The incidence of HCC is low in patients infected with hepatitis B or C virus, if they do not have cirrhotic changes
E. Biopsy is recommended only when the typical imaging appearance is not evident

336. The following statements about hepatic hemangioma are true:
A. It is the most common benign liver tumor
B. They are often discovered accidentally
C. Cavernous hemangioma larger than 10 cm is defined as giant hemangioma
D. Computed tomography with contrast highlights the progressive capture of the contrast substance towards the periphery of the lesion
E. In most cases the pain has another etiology

337. Which of the following statements about focal nodular hyperplasia (NFH) is not true?
A. It is a benign lesion
B. It is a well circumscribed lesion in the liver parenchyma
C. Liver function is impaired
D. They are rarely associated with rupture or hemorrhage
E. They have malignant potential

338. Which of the following statements about liver adenoma is true?
A. It is common in women over 60 years of age
B. It is a solitary lesion
C. It is an encapsulated lesion
D. It presents a risk of bleeding
E. It presents a risk of malignant transformation

339. The following statements about malignant liver tumors are true:
A. Hepatocellular carcinoma has a susceptibility for invasion of the tributary vessels of the portal system
B. Any liver mass larger than 1 cm in a cirrhotic patient should be investigated to rule out possible hepatocarcinoma.
C. Peripheral cholangiocarcinoma causes obstructive jaundice
D. In the case of hepatocellular carcinoma associated with liver cirrhosis, most surgeons prefer extensive liver resections
E. Ablative treatments (MWA, RFA) are considered superior to liver resection in the case of metastases

340. Which of the following are non-curative strategies in hepatocellular carcinoma?
A. Radiofrequency ablation (RFA)
B. Chemoembolisation
C. Radioembolisation

D. Microwave ablation (MWA)
E. Liver resection

341. Most simple liver cysts:
A. They are small in size
B. They are large in size
C. They are symptomatic
D. It communicates with the biliary tree
E. They contain serous fluid

342. Which of the following statements regarding cystic neoplasm of the liver is false?
A. It occurs more frequently in men
B. It occurs more frequently after the age of 40
C. They are rare
D. They are usually single, small lesions (under 5 cm)
E. They have the potential for malignant transformation

343. Which of the following statements regarding the epidemiology of gallstones is true:
A. The incidence of gallstones increases with age
B. In Caucasian men, under the age of 50, the prevalence is 4--10%,
C. Women are affected about 3 times more frequently than men
D. The prevalence of gallstones in Caucasian women under the age of 50 is 25%
E. Gallstones tend not to show familial aggregation.

344. Predispose to the formation of calculations:
A. Obesity
B. Nulliparity
C. Rapid weight loss
D. Increased doses of estrogen-based oral contraceptives
E. Prolonged total parenteral nutrition

345. Black pigment stones:
A. They are found in cases of infection of the bile
B. It represents approximately 20% of all gallstones
C. They appear primitively in the bile ducts and are soft
D. They are generally found in the gallbladder
E. They are usually associated with hemolytic diseases and liver cirrhosis

346. The following statements regarding the pathogenesis of gallstones are false:
A. Small stones represent about 75% of all types of stones
B. Most small stones contain enough calcium to become radiopaque

C. Occasionally, a single large calculus is formed, composed almost entirely of cholesterol
D. Incomplete evacuation of the gallbladder does not provide ideal conditions for conglomeration
E. The source of most stones located in the bile ducts (choledocholithiasis) is the gallbladder

347. Bile "sludge":
A. Contains mucoproteins, cholesterol crystals and calcium bilirubin
B. It is often found in cases of long-term maintenance of parenteral nutrition
C. It can be a precursor to gallstones
D. Contains mucoproteins, cholesterol crystals and sodium bilirubin
E. It is often found in cases of starvation and rapid weight loss

348. *Vascularization of the gallbladder is ensured by:
A. Superior mesenteric artery
B. Own hepatic artery
C. Right gastric artery
D. Right hepatic artery
E. Gastroduodenal artery

349. In biliary colic:
A. The pain is usually constant, quite severe
B. The pain is visceral
C. The pain is more frequent, in the epigastrium, with anteroposterior radiation at the same level
D. The pain is visceral, often described as a dull, continuous, nagging ache
E. The pain is not constant

350. Biliary colic:
A. It is produced by obstruction and is not associated with inflammation or infection
B. It tends to occur postprandial, possibly after a large or high-fat meal
C. It can be accompanied by nausea and vomiting.
D. It is not improved over time and by strong analgesics
E. It is considered that the pain is the consequence of the increase in pressure in the gallbladder

351. In acute cholecystitis:
A. Palpation pain, constant or progressively worse, located in the right hypochondrium or epigastrium
B. Pain is mediated by vegetative sensory nerves

C. The pain lasts over 3-4 hours and can continue for several days
D. Pain is mediated by somatic sensory nerves
E. Dull, vague or insignificant pain in the upper abdomen

352. On clinical examination, in acute cholecystitis:
A. The patient has a restless, agitated attitude
B. The pulse may be elevated secondary to pain, inflammation or infection
C. Abdominal examination reveals a positive Murphy's sign
D. Abdominal examination reveals a positive Blomberg sign
E. The patient tends not to move

353. Alkaline phosphatase (FA):
A. It is synthesized by the bile duct epithelium
B. The increase in FA and GGT is greater than the increase in AST and ALT in cases of acute hepatitis
C. The serum level of this enzyme is moderately elevated in hepatitis
D. The concomitant decrease in gamma-glutamyl transferase (GGT) also indicates that the source of FA increase is the biliary tract
E. The increase in FA and GGT is greater than the increase in AST and ALT in cases of biliary obstruction

354. *The initial exploration, of choice, in the case of patients with biliary disorders is:
A. Computer tomography
B. Oral cholecysto-gastrography
C. Ultrasound
D. Plain abdominal X-ray
E. Magnetic resonance cholangiopancreatography (MRCP)

355. *The following statements about abdominal ultrasound are true except:
A. The sensitivity and specificity of ultrasound in the detection of gallstones are 95%
B. Ultrasound has a low sensitivity in detecting bile duct dilatations
C. Ultrasound is less useful in highlighting bile duct stones
D. Provides information about the liver and pancreas
E. Ultrasound can successfully detect stones up to 3 mm in diameter

356. In acute cholecystitis, the differential diagnosis includes:
A. Acute hepatitis,
B. Acute pancreatitis,
C. Perforated ulcer
D. Acute appendicitis
E. Perforated sigmoiditis

357. Chronic cholecystitis:
   A. It is the most common form of symptomatic cholecystitis
   B. The pain is colicky and localized in HD and epigastrium
   C. Fever and chills are present
   D. Abdominal examination reveals a positive Murphy's sign
   E. Nausea and vomiting may accompany the pain

358. Ursodeoxycholic acid:
   A. It has a dissolution rate of 90% for stones smaller than 5 mm and 60% for stones smaller than 10 mm
   B. it is administered for at least 6 months and even for a year.
   C. It has a dissolution rate of 60% for stones smaller than 5 mm and 90% for stones smaller than 10 mm
   D. It reduces the saturation of bile with cholesterol by inhibiting cholesterol secretion
   E. It is the most frequently administered substance in the non-surgical treatment of symptomatic gallstones

359. In acute cholangitis, the Charcot triad is characterized by:
   A. Hypotension
   B. Jaundice
   C. Abdominal pain in the right hypochondrium
   D. Fever associated with chills
   E. Mental confusion

360. Which of the following statements about acute biliary pancreatitis are true:
   A. Occurs due to transient or persistent obstruction of the pancreatic duct, usually at the ampulla of Vater,
   B. Nausea, vomiting and mild fever are rare
   C. Tachycardia and hypotension secondary to hypovolemia are common
   D. Patients with acute pancreatitis present with abdominal pain in the upper floor, often radiating to the back, and sensitivity to palpation of the abdomen at this level
   E. The severity of acute pancreatitis can be determined based on clinical, laboratory and radiological risk factors.

361. *Biliary lleus is characterized by , except:
   A. It accounts for <1% of all cases of intestinal occlusion
   B. It is an unusual complication that involves erosion of the gallbladder wall by a stone that penetrates into the adjacent intestine
   C. Patients present with symptoms of intestinal occlusion and air in the biliary tree

D. Biliary ileus occurs more frequently in men than in women
E. A history of biliary colic or gallstones is common in these patients

362. Risk factors for gallbladder cancer are:
A. Gallstones
B. Patients with gallbladder polyps with a diameter of 1.5 cm
C. Porcelain gallbladder
D. Infection of the gallbladder with Klebsiella pneumoniae
E. Primary sclerosing cholangitis

363. *Gallbladder cancer:
A. The maximum incidence is in the fifth decade of life
B. A 3:1 ratio in favor of women
C. It is found in 5--11 % of all cholecystectomy pieces
D. The correct diagnosis is established preoperatively in 40% of cases
E. Symptoms of early disease are often directly caused by the neoplastic disease.

364. In patients with gallbladder cancer:
A. Jaundice is present in approximately 50% of these patients
B. CT and MRCP accurately identify the extent of the disease and are important imaging investigations for evaluating the existence of metastases
C. Patients with preoperative suspicion of gallbladder neoplasm are candidates for laparoscopic cholecystectomy
D. The survival rate at 5 years remains high (>25% at 5 years),
E. Advanced tumors may require a formal liver resection

365. *Cancer of the bile ducts:
A. It is responsible for approximately 10% of all Gl neoplasias
B. Intrahepatic cholangiocarcinoma is the most common
C. It occurs with equal frequency in both sexes
D. Extrahepatic cholangiocarcinoma represents only 10% of biliary tract neoplasms
E. Chronic inflammatory processes do not precede the development of neoplasia.

366. *The following statements about cholangiocarcinoma are true except:
A. The risk of developing a biliary tract neoplasia is significantly higher in people with primary sclerosing cholangitis
B. Approximately one third of people with biliary tract carcinoma also have associated gallbladder lithiasis
C. Neoplasms of the biliary tract are locally advanced tumors with rapid development, which frequently metastasize at a distance.

D. Frequent symptoms are associated with local development causing biliary obstruction
E. On clinical examination, hepatomegaly can be detected

367. For patients with cholangiocarcinoma:
A. The prognosis is reserved, with a 5-year survival of only 5-10%
B. Surgery is the only curative treatment,
C. Intrahepatic cholangiocarcinomas are usually treated by liver resections, but negative margins are obtained in >50% of patients
D. The 5-year survival rate after resection of middle third lesions is approximately 30%
E. Perihilar tumors, also called Klatskin tumors, are best treated by the Whipple operation

368. *Congenital choledochal cysts:
A. They are more common in women (female/male ratio 4:1) and in the Asian population
B. They are more common in men (4:1 male to female ratio) and in the Asian population
C. Choledochian cysts are best evaluated initially by ultrasound
D. It is generally recommended that these cysts not be resected
E. MRCP or ERCP does not further outline specific anatomical details

369. *Characteristics of biliary ileus are as follows except:
A. Young patient, without associated pathologies
B. Elderly patient, emaciated
C. Incomplete intestinal occlusion
D. X-ray shows air in the bile ducts
E. Ultrasound reveals gallbladder lithiasis and air in the biliary tree

370. Biliary tract injuries:
A. The incidence of biliary tract injuries associated with laparoscopic cholecystectomy (0.4-0.6%) is approximately 4 times lower than that associated with classic cholecystectomy
B. Approximately 25% of injuries occur following a simple cholecystectomy and involve sectioning the bile duct and its vasculature near the liver
C. Lesions may involve the common bile duct, the common hepatic duct, or the left and right hepatic ducts
D. If the lesion involves <50% of the bile duct circumference, without significant devascularization, primary repair cannot be performed
E. Lesions of accessory ducts smaller than 3 mm draining a small portion of liver parenchyma may be ligated

371. Complications of biliary stricture are represented by:
A. Obstructive jaundice
B. Recurrent angiocolitis
C. Biliary cirrhosis
D. Acute pancreatitis
E. Portal hypertension

372. Laparoscopic cholecystectomy:
A. The main risks associated with the laparoscopy approach are related to injuries of the bile ducts, the intestine and the main vessels
B. The disadvantages of the laparoscopic approach are the increase in wound and pulmonary complications
C. If the patient has serious comorbidities or if the surgery is performed for acute cholecystitis, the postoperative hospitalization is usually a minimum of 72 hours
D. If there are technical difficulties encountered with the laparoscopic approach, the minimally invasive procedure should be converted to an open approach.
E. If intraoperative cholangiography reveals calculi in the CBP, they can be removed laparoscopically through the cystic channel

373. Characteristics of choledochal lithiasis:
A. History of abdominal pain
B. Jaundice
C. Hipocrome urine
D. Discolored seats
E. Positive Murphy sign

374. Biliary scintigraphy with radionuclides HIDA (hepatobiliary iminodiacetic acid):
A. The sensitivity and specificity of HIDA scintigraphy in the diagnosis of acute cholecystitis are 95-97%, respectively 90-97%.
B. HIDA scintigraphy is useful in identifying gallstones of CBP
C. Visualization of the CBP and duodenum in the absence of visualization of the gallbladder after 4 hours indicates cystic duct obstruction
D. False-negative results may occur in patients receiving only parenteral nutrition or in those with hepatitis
This investigation is also useful in identifying a possible postoperative biliary fistula

375. The major etiologies of acute mesenteric ischemia (AMI) are:
A. Embolism of the superior mesenteric artery (SMA)
B. Factor VII mutation
C. Hypocoagulable state

D. Thrombosis of the superior mesenteric artery (SMA)
E. Splanchnic circulation vasodilation

376. The pain associated with acute mesenteric ischemia (AMI):
A. Has a sudden onset
B. Pain is disproportionate to physical examination findings
C. Pain is proportional to physical examination findings
D. Classically not severe
E. Has an insidious onset

377. Once a patient presents clinical signs of peritonitis:
A. Small bowel infarction has already occurred
B. Small bowel infarction has not yet occurred
C. Indicates local superinfection
D. Is due to associated gastric perforation
E. Mortality is high

378. Patients with non-occlusive mesenteric ischemia (NOMI):
A. Hemodynamic instability is the main cause
B. Present with a specific clinical picture
C. May have mild abdominal pain
D. Have a nonspecific clinical presentation
E. The predominant clinical feature is hemodynamic stability

379. * For superior mesenteric vein (SMV) thrombosis, the first-line treatment is:
A. Prompt anticoagulation with intravenous heparin
B. Intravenous antibiotic therapy
C. Surgical decompression
D. Endoscopic decompression
E. Fluid and electrolyte rebalancing

380. * The gold standard for the paraclinical diagnosis of acute mesenteric ischemia is:
A. Contrast barium enema (irrigography)
B. Endoscopic capsule
C. Mesenteric arteriography
D. Gastroduodenoscopy
E. Aortography

381. Benign tumors of the small intestine:
A. Are much more common than malignant ones
B. Are less common than malignant ones
C. Are mostly asymptomatic

D. Rapidly cause obstructive symptoms
E. Rapidly cause hemorrhagic symptoms

382. As the tumor grows in size:
A. It may cause intussusception
B. Always causes perforation
C. Becomes malignant
D. Fixes intraperitoneally
E. May cause obstruction

383. Adenocarcinomas of the small intestine:
A. Are more common in the jejunum
B. Never occur in the duodenum
C. Are more common in the duodenum
D. Have lower incidence toward the ileum
E. Have higher incidence toward the ileum

384. The most common presentations of small intestine adenocarcinomas are:
A. Obstruction
B. Peritonitis
C. Obstruction often associated with weight loss
D. Perforation
E. Peritoneal hemorrhage

385. Suspicion of a small intestine neoplasm increases when there is:
A. Small bowel obstruction without hernia
B. Colon cancer
C. Small bowel obstruction without a history of prior surgery
D. Family history of colon cancer
E. Obstruction in an elderly person

386. Tumors in the periampullary region may present with:
A. Painful jaundice
B. Painless jaundice
C. Less commonly, with unexplained pancreatitis
D. More commonly, with unexplained pancreatitis
E. Hemobilia

387. * The diagnosis of small intestine tumors is made:
A. By arteriography
B. By selective arteriography
C. By complete aortography

D. Most commonly through contrast-enhanced evaluations
E. By endoscopy

388. * The most frequent presentation of carcinoid tumors of the small intestine is:
A. Hemorrhage
B. Perforation
C. Obstruction
D. Inflammation
E. Peritonitis

389. The most common manifestations associated with Meckel's diverticulum include:
A. Obstruction
B. Intussusception
C. Inflammation
D. Peritonitis
E. Weight loss

390. Hemorrhage associated with Meckel's diverticulum presents as:
A. Melena
B. Rectal bleeding with bright red blood
C. Rectal bleeding with dark red blood
D. Frequently with pain
E. Lower gastrointestinal bleeding

391. Intestinal obstruction associated with Meckel’s diverticulum can occur due to:
A. Malignant degeneration
B. Volvulus of the small intestine around the diverticulum
C. Volvulus of the diverticulum
D. Constrictive effect of a mesodiverticular band
E. Massive intraluminal bleeding

392. Differential diagnosis of Meckel’s diverticulum pathology can be made with:
A. Acute appendicitis
B. Pelvic inflammatory disease
C. Regional enteritis
D. Myodysplasia
E. Right renal colic

393. * Short bowel syndrome, sometimes referred to as "short intestine", is defined as:
A. The presence of <80 cm of small intestine in an adult
B. Generally, resection of a portion of the small intestine
C. The presence of <280 cm of small intestine in an adult

D. The presence of <180 cm of small intestine in an adult
E. The presence of <80 cm of large intestine in an adult

394. * Loss of the terminal ileum leads to permanent loss of:
A. Iron absorption
B. Vitamin B6 absorption
C. Carbohydrate absorption
D. Vitamin B12 absorption
E. Vitamin C absorption

395. Anatomically, the colon differs from the small intestine in the following ways:
A. Caliber
B. Degree of fixation
C. Presence of epiploic appendages
D. Presence of teniae and haustra on its surface
E. One is located in the thoracic cavity

396. True statements about the anatomy of the colon:
A. The diameter of the colon varies in its different segments
B. The cecum has an average diameter of 7.5 cm, while the sigmoid colon has an average diameter of 2.5 cm
C. A large part of the colon is retroperitoneal and fixed to the posterolateral abdominal wall
D. Additionally, the colon has epiploic appendages, which are fatty structures on the serosa
E. Epiploic appendages are present in the cecum, appendiceal area, and rectum

397. The wall of the colon is composed of:
A. Mucosa
B. Submucosa
C. Muscular layer
D. Serosa
E. Pleura

398. The rectum:
A. Begins at the rectosigmoid junction and ends at the anorectal ring
B. Is approximately 12–18 cm in length
C. Has three submucosal folds called “rectal valves” (of Houston)
D. The upper two-thirds are covered anteriorly by peritoneum and attached posteriorly to the retroperitoneum
E. Is the first part of the small intestine

399. Arterial entities involved in the vascularization of the rectum:
A. Superior hemorrhoidal artery (also known as the rectal artery)
B. Inferior mesenteric artery
C. Middle hemorrhoidal artery
D. Celiac trunk
E. Superior mesenteric artery

400. Anal crypts:
A. End at the base of Morgagni's columns
B. Are sites where secretions are expelled
C. Are found throughout the entire colon
D. Are visible only microscopically
E. Are specific to the transverse colon

401. * The major histological difference between the colon and small intestine is:
A. Presence of signet-ring cells
B. Number of layers
C. Presence of different cell types
D. Visibility under examination
E. Absence of villi

402. *Arterial blood supply to the anal canal and anal sphincter is provided by:
A. Celiac trunk
B. Inferior hemorrhoidal artery
C. Inferior mesenteric artery
D. Superior mesenteric artery
E. Right colic artery

403. Acute appendicitis:
A. Is the most common surgical emergency
B. Affects approximately 6.7% of women and 8.6% of men
C. Is a very rare condition
D. Is never a surgical emergency
E. Occurs only in children

404. The differential diagnosis of right lower abdominal quadrant pain includes various conditions:
A. Enteric
B. Urological
C. Musculoskeletal
D. Gynecological
E. Thoracic

405. Conditions that may mimic appendicitis include:
A. Meckel's diverticulitis
B. Cecal or sigmoid diverticulitis
C. Acute ileitis
D. Cholecystitis
E. Splenomegaly

406. Appropriate preoperative preparation in the surgical treatment of acute appendicitis includes:
A. Second-generation cephalosporin
B. Broad-spectrum penicillin
C. Combination of fluoroquinolone and anaerobic coverage with metronidazole
D. Does not include antibiotics
E. Is contraindicated

407. Tumors of the appendix may include:
A. Carcinoid
B. Carcinoma
C. Mucocele
D. Rhinophyma
E. Bubonocel

408. Most appendiceal carcinoids are benign, but can be a source of:
A. Luminal obstruction
B. Gastroesophageal reflux
C. Appendicitis
D. Cholecystitis
E. Transverse colon carcinoma

409. * If the appendix perforates, there may be temporary relief of visceral pain due to:
A. Patient distraction
B. Decompression of the distended organ
C. Emergence of new conditions
D. The insignificant nature of the disease
E. Presence of mucus

410. * In pregnancy, the diagnosis of acute appendicitis can be complicated by:
A. Anemia
B. Prostate-specific antigen
C. Leukocytosis
D. Axillary pain
E. Loss of appetite

411. *The following statement about colonic diverticulosis is true:
A. Colonic diverticulosis is the least common endoscopic finding
B. The prevalence of this condition decreases with age
C. The most frequent location of diverticular disease is the sigmoid colon
D. Congenital diverticula are more often located in the left colon
E. The majority of patients (80%) become symptomatic during their lifetime

412. * Clinical presentation in Ulcerative Colitis:
A. Most patients present with mucopurulent, bloody diarrhea
B. The initial clinical presentation does not vary with the extent of colonic lesions
C. Fever cannot indicate the presence of multiple intestinal microabscesses or secondary endotoxemia
D. Extraintestinal manifestations occur in a high percentage of patients
E. The reference investigation for diagnosis is computed tomography

413. Treatment of diverticular disease complications includes:
A. In 85% of cases, acute diverticulitis is initially treated medically
B. Most patients, however, do not respond to non-surgical treatment and require further intervention
C. A patient with recurrent acute diverticulitis (more than 1 episode per year) will be operated on urgently
D. First-line treatment for patients with fistulas in the context of diverticular disease is surgical
E. Patients with free intraperitoneal perforation undergo emergency surgery, the most common being Hartmann’s procedure

414. Diverticular bleeding:
A. 70% of lower GI bleeds are due to diverticulosis
B. Diverticular bleeding is always minimal
C. Colonoscopy is the main method for diagnosing lower GI bleeding and can also be therapeutic
D. Most diverticular-origin bleeds are controlled conservatively
E. If the patient is on anticoagulant or antiplatelet therapy, it should not be discontinued

415. The following statements about Ulcerative Colitis and Crohn’s Disease are true:
A. Ulcerative colitis and Crohn's disease are two of the rarest forms of inflammatory bowel disease
B. Ulcerative colitis is a transmural condition that can affect any part of the GI tract, from the mouth to the anus
C. Ulcerative colitis affects the mucosa and submucosa and involves only the colon and rectum
D. Macroscopic features distinguishing Crohn’s disease from Ulcerative Colitis include

rectal sparing, discontinuous lesions (alternating healthy and affected areas), aphthous ulcers, and linear ulcers
E. The etiology of Ulcerative Colitis is not fully understood; infectious, immunologic, genetic, and environmental factors are believed to be involved

416. In the surgical treatment of Ulcerative Colitis, the following statements are correct:
A. Surgical indication in fulminant colitis and toxic megacolon
B. Surgical treatment in disease refractory to medical treatment
C. Patients who have developed dysplasia or cancer have a contraindication to surgery
D. Patients with severe complications will first undergo surgical intervention, followed by resuscitative treatment
E. Proctocolectomy with ileoanal pouch is currently considered the surgical procedure of choice

417. Crohn's disease, compared to Ulcerative Colitis, presents with:
A. More frequent diarrhea, more commonly with blood
B. The rectum is always affected
C. Perianal fistula is common
D. Megacolon is much more frequent
E. Segmental distribution, patchy lesions, versus Ulcerative Colitis which has continuous distribution

418. Indications for surgical treatment in diverticular disease:
A. Free perforation
B. Obstruction
C. Hemorrhage
D. A diverticulitis episode every 3–4 years
E. Uncomplicated diverticulitis, when Hartmann’s resection is performed

419. * In adults, the most common cause of colonic obstruction is:
A. Colon cancer
B. Rectal cancer
C. Diverticular disease
D. Colonic volvulus
E. All of the above

420. The most relevant symptoms in the diagnosis of large bowel obstruction are:
A. Absence of intestinal passage for gas and stool
B. Nausea and vomiting
C. Bloody diarrhea
D. Perianal fistulas
E. Changes in stool caliber, which raises suspicion of carcinoma

421. In the treatment of large bowel obstruction, the following statements are correct:
A. Initial therapy includes volume resuscitation and correction of electrolyte imbalances
B. Surgery is almost always indicated in patients with complete obstruction
C. Emergency laparotomy is performed for acute intestinal obstruction with cecal distension over 12 cm, increased abdominal tenderness, signs of peritonitis, or sepsis
D. In patients with obstructive cancer and peritonitis, an endoscopic stent is placed for decompression
E. Perforation caused by volvulus and obstructive cancers is managed endoscopically

422. * Clinical manifestations of colonic volvulus include:
A. Abdominal pain
B. Cessation of intestinal transit
C. Nausea
D. Vomiting
E. All of the above

423. In colonic volvulus, the following statements are correct:
A. Physical examination reveals abdominal distension, tenderness, and often an empty rectal ampulla on digital rectal exam
B. Sigmoid volvulus commonly occurs in elderly patients with a history of constipation and dementia
C. Imaging evaluation should be done early when volvulus is suspected, as it can rapidly establish the diagnosis
D. Contrast-enhanced CT has limited indications in the diagnosis of colonic volvulus
E. Abdominal X-ray remains the investigation of choice for diagnosing colonic volvulus

424. In the treatment of colonic volvulus, the following statements are correct:
A. In the absence of ischemia or perforation, the initial treatment of sigmoid volvulus is endoscopic detorsion, effective in 60–95% of cases
B. Due to the high risk of volvulus recurrence and risks associated with each episode, surgical intervention should be considered
C. Among elective procedures for sigmoid volvulus, sigmoid resection with anastomosis is the most effective in preventing recurrence
D. In cases of perforation or non-viable colon, emergency colonoscopy is performed
E. In cecal volvulus, endoscopic decompression is the procedure of choice

425. Rectal mucosal prolapse is characterized by:
A. Radial folds
B. Concentric folds
C. Circumferential folds
D. Eversion of 2–3 cm
E. Eversion of 4–20 cm

426. Rectal procidentia:
A. Represents mucosal eversion through the anal orifice
B. Represents protrusion of the entire rectal wall through the anal canal
C. Represents prolapse of hemorrhoidal cushions
D. Occurs more frequently in overweight, hypersthenic men
E. Occurs especially in thin, asthenic women

427. Grade III hemorrhoids:
A. Do not prolapse
B. Prolapse during defecation
C. Return to normal position spontaneously
D. Require manual reduction
E. Are not reducible

428. Treatment of rectal prolapse may involve:
A. A perineal procedure
B. An intra-abdominal procedure
C. Resection of the redundant bowel segment
D. Suturing the colonic wall to the prepubic fascia
E. Colopexy

429. Rubber band ligation is indicated for internal hemorrhoids of grade:
A. I, asymptomatic
B. I, symptomatic
C. II
D. III
E. IV

430. Conservative treatment of thrombosed external hemorrhoids includes:
A. Sitz baths
B. Sitz cushions
C. Local heat
D. Local ice
E. Non-steroidal anti-inflammatory drugs (NSAIDs)

431. Surgical treatment of thrombosed external hemorrhoids includes:
A. Intervention within the first 48 hours after onset
B. Intervention after 48 hours from onset
C. Rubber band ligation
D. Excision of the thrombosed hemorrhoid under local anesthesia
E. Incision of the thrombosed hemorrhoid under general anesthesia

432. Differential diagnoses of anorectal abscesses include:
A. Prolapsed hemorrhoids
B. Thrombosed hemorrhoids
C. Anal fissure
D. Perianal fistula
E. Pilonidal disease

433. * The surgical treatment of choice for chronic anal fissures is:
A. Right lateral internal sphincterotomy
B. Right lateral external sphincterotomy
C. Left lateral internal sphincterotomy
D. Left lateral external sphincterotomy
E. Total sphincterotomy

434. * Factors that lead to failure of the endoanal advancement flap technique for perianal fistula treatment include all of the following **except**:
A. Acute episode of proctitis
B. Rectovaginal fistula
C. Obesity
D. Neoplasms
E. History of chemotherapy

435. *An anal fissure is considered chronic after how long from onset?
A. 14 days
B. 4 weeks
C. 8 weeks
D. 4 months
E. 6 months

436. The HPV strains most commonly involved in the development of anal canal cancers are:
A. 6
B. 11
C. 14
D. 16
E. 18

437. In primary anorectal syphilis:
A. The syphilitic chancre appears as a small papule that eventually develops into an ulcer
B. Anal ulcers are generally painless and moist
C. Lymphadenopathy is painless and large
D. Lymphadenopathy is painful and small
E. Proctitis may occur in the presence or absence of the syphilitic chancre

438. * In untreated anorectal syphilis, the secondary stage of the disease occurs approximately:
A. 2–4 weeks after the appearance of primary lesions
B. 2–4 weeks after the disappearance of primary lesions
C. 4–10 weeks after the appearance of primary lesions
D. 4–10 weeks after the disappearance of primary lesions
E. 2–10 weeks after sexual contact.

ANSWERS CHAP. XII – SURGERY

1	B	40	A, B, E	79	D	118	B, C, E
2	B, C	41	A, B, E	80	B, C, E	119	E
3	A, B, D	42	A, B, E	81	A, D	120	D
4	B	43	C	82	A, B, C	121	A
5	C	44	C	83	A, B, C, E	122	B
6	A, B, E	45	B	84	B, C, E	123	C
7	A, D, E	46	D	85	A, C, E	124	A, D, E
8	A, C, E	47	A	86	C	125	A, B, E
9	B, C, E	48	C	87	E	126	B, C, D
10	C	49	A	88	A, C, D, E	127	A, B, D
11	B, C	50	A	89	C	128	A, B, C
12	A, B, E	51	B	90	D, E	129	B, C, E
13	B	52	A, B, C, E	91	A, C	130	B, D, E
14	A	53	A, C	92	B, C, E	131	B, C, D, E
15	A, B	54	A, B, D, E	93	B	132	A, C, D
16	A, C, D	55	A, B, C, E	94	B, C, D	133	B, C, D
17	B, C, E	56	A, B, C	95	A, B, C, D	134	A, B, C
18	A, C, E	57	A, B, C, D	96	A	135	B, C, E
19	A	58	A, B, E	97	A, B, C	136	E
20	A	59	A, B, E	98	A, B, D	137	A
21	A	60	A, C, D	99	A, B, D	138	B
22	A	61	B, C, D	100	C, D, E	139	E
23	A	62	A, B, D, E	101	B, C, D	140	B, D, E
24	A	63	A, B, C, E	102	A, C	141	A, B, D
25	A, B, C	64	A, B, D, E	103	D	142	A, B
26	A, B, C, D	65	A, B, E	104	A, B, D, E	143	A, D, E
27	A, B, C, D	66	A, B, D, E	105	A, C	144	A, C, D
28	A, B, C, E	67	A, C, E	106	A, B, C, E	145	A, B
29	A, B, C, D	68	A, B, C, D	107	C	146	A, B, E
30	A, B, C, D	69	A, B, C	108	A, C, E	147	B, C, D
31	A, B	70	A, B, D	109	B, C, E	148	A, C, D, E
32	A, C, E	71	A, B, C	110	D	149	A, B, D
33	A, B, E	72	A, B, C, E	111	A, C, E	150	A, B, E
34	A, B, E	73	A, B, C, D	112	B, C, D	151	B, C, D
35	A, D	74	A, B, C	113	A, C, D	152	D
36	A, B, C, D	75	A, B, C	114	D	153	C
37	A, B, E	76	A, B, C, D	115	B, E	154	B, D
38	A, B, E	77	A, B, C, E	116	A, C	155	C, D

39	A, B, E	78	A, B, D	117	A, C, D, E	156	A, C, E
157	A, B, C, E	196	A, C	235	B, C, D	274	C, D
158	C	197	B, D, E	236	A, C	275	D, E
159	C	198	A, B, C, E	237	A, C, E	276	A, B
160	A, B, C	199	A, B, E	238	A, B, D	277	B, C, D, E
161	A, C, D, E	200	B, D	239	E	278	A, C
162	A, B, C, D	201	B, C	240	A, D, E	279	B, E
163	B, C, D	202	B, D, E	241	A, C	280	A, C, D
164	A	203	B, C, E	242	D	281	B, D
165	A, D	204	A, B, D, E	243	A, D, E	282	A, B, D
166	B, D	205	A, B, C, E	244	B, E	283	A, B, C, D
167	C	206	B, C, E	245	A	284	C, D, E
168	C	207	A, C, D, E	246	B	285	A, C
169	A, C, D	208	A, D, E	247	D	286	B, C, E
170	B, C, E	209	B, E	248	B, C, E	287	B, C, E
171	B, C, D	210	B, D, E	249	A, E	288	D, E
172	A, C, D, E	211	B	250	B, C, E	289	A,C, D, E
173	C	212	A, C, E	251	B, C, D, E	290	A, B
174	A, D, E	213	B, D, E	252	C, E	291	A, B, C, D
175	A, C, D, E	214	B, C, D, E	253	B, C, D	292	A, C, D, E
176	C	215	D	254	D	293	A, B, C
177	C	216	D, E	255	A, B, D	294	A, B
178	B, C, E	217	A, B, C	256	A, B, C, E	295	A, D
179	B, C, D, E	218	C, E	257	D	296	C
180	A, D, E	219	A, C, D	258	A, B, D, E	297	A, B
181	B, C, D	220	C, D	259	A, D, E	298	A, B, D
182	B	221	A, B, C, E	260	D, E	299	A, B, C, D
183	D	222	C, D	261	B, C	300	A, B, C
184	A	223	E	262	A	301	A, B, C, E
185	E	224	B, E	263	D	302	C
186	A	225	A, B	264	A, B, C, E	303	A
187	E	226	A, D	265	A, B, D, E	304	A
188	D	227	D	266	A, C, E	305	A
189	B, C, D, E	228	A, B, C, D	267	C, E	306	C
190	B, C, E	229	C, E	268	A, E	307	C
191	B, D	230	D	269	C, E	308	A
192	A, C, D, E	231	C	270	B, D	309	A
193	C, E	232	C	271	C, D	310	E
194	A, C, E	233	B, D, E	272	A, D	311	C
195	B, C, D	234	B, C, E	273	A, C	312	B

313 A
314 A
315 A, B, C, E
316 A, B, C
317 A, B, C
318 B, C, D
319 A, B, C
320 A, B, D, E
321 A, B, C, E
322 A, C
323 E
324 C
325 A, B, D
326 B, D, E
327 C, E
328 A, B, D
329 D
330 C
331 E
332 B
333 A, C
334 C, E
335 A, B, C, E
336 A, B, C, E
337 C, E
338 B, D, E
339 A, B
340 B, C
341 A, E
342 A, D
343 A, B, C
344 A, C, D, E
345 B, D, E
346 B, D
347 A, B, C, E
348 D
349 A, B, D
350 A, B, C, E
351 A, C, D
352 B, C, E
353 A, C, E
354 C
355 B
356 A, B, C, D
357 A, B, E
358 A, B, D, E
359 B, C, D
360 A, C, D, E
361 D
362 A, B, C, E
363 B
364 A, B, E
365 C
366 C
367 A, B
368 A
369 A
370 C, E
371 A, B, C, E
372 A, D, E
373 A, B, D
374 A, C, E
375 A, D
376 A, B
377 A, E
378 A, D
379 A
380 C
381 A, C
382 A, E
383 C, D
384 A, C
385 A, C
386 B, C
387 D
388 C
389 A, C
390 B, C
391 B, D
392 A, C
393 D
394 D
395 A, B, C, D
396 A, B, C, D
397 A, B, C, D
398 A, B, C, D
399 A, B, C
400 A, B
401 E
402 B
403 A, B
404 A, B, C, D
405 A, B, C, D
406 A, B, C
407 A, B, C
408 A, C
409 B
410 C
411 C
412 A
413 A, D, E
414 A, C, D
415 C, D, E
416 A, B, E
417 C, E
418 A, B, C
419 E
420 A, B, E
421 A, B, C
422 E
423 A, B, C
424 A, B, C
425 A, D
426 B, E
427 B, D
428 A, B, C
429 B, C, D
430 A, D, E
431 A, D
432 B, C, E
433 C
434 E
435 C
436 D, E
437 A, C, E
438 D

CHAP. XIII – PLASTIC SURGERY

1. A 5-year-old child was burned in a car fire and required extensive skin grafts to the facial region and upper extremities. Which statements about the rehabilitation phase of this patient's care are true?
   A. Rehabilitation starts when the injury occurs
   B. Wait for wounds to close before rehabilitation can begin
   C. Contractures of post-surgical scars can completely immobilize the extremities and cause significant functional and aesthetic sequelae
   D. Scar tissue remains inflamed and does not remodel after injury
   E. Many reconstructive procedures can be avoided by early and continuous physiotherapy and other rehabilitation techniques

2. A 35-year-old man is brought to the Emergency Department(ED) with chemical burns to the bilateral mandibles after contact with an unknown substance. Which of the following factors may determine the degree of tissue injury?
   A. Duration of dermal contact
   B. Sex of patient
   C. Concentration of the causative agent
   D. Nature of the causative agent
   E. Patient's hereditary and collateral history

3. A 56-year-old woman is brought to the UPU presenting burns to the hands and forearms bilaterally after contact with caustic soda (sodium hydroxide). About chemical burns produced by alkaline substances, it`s true that:
   A. Medical staff do not have to wear protective equipment
   B. Lesions are generally more superficial than they appear
   C. Alkaline substances dissolve and combine with tissue proteins
   D. Alkaline lesions may penetrate beyond what is visible on examination and will require more fluids for effective volemic resuscitation
   E. Presents the risk of absorption and systemic toxicity to the patient

4. *A 28-year-old man is brought to the ED with chemical burns after accidental contact with sulfuric acid. He has lesions on his face and hands, and a pH of 7.28. Which of the following statements about acid burns is false?
   A. Acids induce protein degradation by hydrolysis, which leads to a shallower scale than that produced by alkaline substances
   B. Lesions are generally more superficial than they appear
   C. Lesions may penetrate beyond what is visible on examination and will require more fluids for effective volemic resuscitation

D. Presents the risk of absorption and systemic toxicity to the patient
E. Healthcare workers must wear protective equipment and detoxify the patient completely before further care

5. A 62-year-old man is brought to the ED with electrical burns after accidental contact with high-voltage wires while fishing. Which of the following statements about electrical burns is true?
   A. Occurs when electric current enters a part of the body, such as the hand, and passes through the tissues of greatest resistance, usually nerves, blood vessels and muscles, to exit through the earth
   B. Electrical injuries are classified as high voltage injuries if they are over 100V
   C. In the case of injuries from contact with industrial current, skin damage may be limited, but there may be associated more extensive damage to the underlying soft tissues
   D. The current moves preferentially sub-tegumentarily, as deeper tissues have less resistance
   E. The true extent of tissue damage in high-voltage injuries may be impossible to determine on initial examination

6. A 62-year-old man is brought to the ED department with electrical burns after accidental contact with high-voltage wires while fishing. What kind of injuries may the patient have?
   A. Flame burns can occur if clothing is ignited without current passing through the patient
   B. Acute complications include cataracts and peripheral neuropathy
   C. Electrical injuries can also be associated with falls and can cause concussions
   D. Current flowing from the source to the ground can cause an electric arc or flash injuries.
   E. The associated blast can cause significant trauma, including a ruptured eardrum

7. *A 57-year-old man is found unconscious next to a high-voltage power cable. What is the first step in dealing with the situation?
   A. An electrocardiogram (ECG) should be performed on all victims of electric shock
   B. Because of the possibility of multiple traumas following the fall and associated involuntary muscle contractions, the patient should be immobilized and treated as a polytrauma victim
   C. Electrical injury can cause arrhythmias, and many patients die from electrically induced ventricular fibrillation or cardiac arrest, so immediate resuscitation is essential
   D. Power sources must be disconnected before the patient can be approached

E. Victims of high voltage injuries should be sent to a burn centre and will require appropriate resuscitation

8. A 25-year-old woman presents with first-degree burns after prolonged sun exposure. The following are true about first-degree burns:
   A. Bleach under digit pressure
   B. It has dextranase phlycthenes, formed from the epidermis with extravasated protein fluid content
   C. They are very painful
   D. Present as hyperemic areas
   E. It forms scars

9. A 25-year-old woman presents with first-degree burns after prolonged sun exposure. Treatment for first-degree burns consists of:
   A. Adequate oral hydration
   B. Soothing topical compounds
   C. In general it is just supportive
   D. Treated by excision and grafting
   E. May include neomycin sulfate to prevent infection

10. A 56-year-old man presents with superficial second-degree burns of the anterior torso post contact with a hot liquid. The following is true:
   A. It has dextranase phlycthenes, formed from the epidermis with extravasated liquid protein content
   B. They are very painful
   C. Exceed the dermis
   D. Erythematous skin
   E. Bleach under direct pressure

11. The following is true regarding second-degree deep burns:
   A. Erythema is often missing
   B. The pain is in most cases greater than for superficial burns
   C. Mostly treated by excision and grafting
   D. Heal without scarring.
   E. They are white-waxed

12. The following is true about third-degree burns:
   A. They are usually painful
   B. The surface of the wound can be any colour
   C. Bleach under digit pressure
   D. The small ones can heal spontaneously

E. Include all skin layers

13. In what forms can inhalation injuries manifest in the burn patient?
    A. Carbon dioxide (CO2) poisoning
    B. Lower respiratory tract injuries
    C. Upper respiratory tract injuries
    D. Oral cavity lesions
    E. Carbon monoxide (CO) poisoning

14. * Which statement about carbon monoxide poisoning is false?
    A. CO binds competitively to oxygen receptors on the hemoglobin molecule
    B. Tissues with high oxygen demand are the most vulnerable
    C. Treatment consists of 100% oxygen ventilation
    D. Pulse oximetry accurately detects CO.
    E. CO poisoning causes altered mental status

15. * Which of the following is true?
    A. Upper airway injuries are true inhalation injuries
    B. Lower airway injuries are caused by heat
    C. Early orotracheal intubation is not necessary in the acute period in patients with airway injury.
    D. The hallmark of cyanide poisoning is persistent metabolic acidosis unresponsive to fluid resuscitation
    E. Symptoms in patients with airway burns always appear within the first 24-48 hours

16. *The following applies to the initial treatment of patients with burns, except:
    A. Placing an oxygen mask on a flame burn victim runs the risk of reigniting the smouldering clothing
    B. Even in the absence of smoke exposure, patients with severe facial burns may develop massive oedema that can lead to supraglottic airway obstruction
    C. Formal calculation of fluid needs postponed until after the secondary assessment
    D. Sores should not be covered with antibiotics or other creams or dressed before the secondary assessment is completed
    E. In estimating the total area burned, burns of any degree are included

17. Initial resuscitation of burn patients requires the following:
    A. Fitting a Foley catheter
    B. Providing two large calibre venous lines
    C. Administration of blood or blood components
    D. Draw blood for analysis
    E. Calculation of fluid requirements during primary examination

18. Criteria for transfer to the burn centre include:
    A. 3rd degree burns only in children
    B. Chemical burns
    C. Burns involving the face, hands, feet, genitals, perineum or major joints
    D. Inhalation injuries
    E. Partial depth burn with <5% SCT

19. *The criteria for transfer to the burn centre include the following, excepting:
    A. Burns in patients with pre-existing medical conditions that may complicate burn management, prolong recovery or affect mortality
    B. Burns in children in hospitals without qualified staff or equipment to care for them
    C. Burns in patients who will require special social reintegration, emotional and rehabilitation interventions
    D. First-degree burns in any age group
    E. Burns involving the face, hands, feet, genitals, perineum or major joints

20. *One of the main methods of documenting the burned area is his rule:
    A. 7
    B. 8
    C. 9
    D. 10
    E. 20

21. Which of the following is true?
    A. Post-combustion shock generally occurs in burns above 15-20% SCT
    B. The swelling appears in the first 24 hours after the wound, being most pronounced in the first 8 hours
    C. Half of the total fluid is given in the first 16 hours
    D. Maintenance of adequate urine output is used as an indicator of adequate fluid intake and as a treatment goal
    E. Fluid resuscitation does not stop fluid extravasation into the interstitial space

22. Which of the following is true?
    A. Frequent assessment of extremity pulse, motor and sensory function and pain is essential
    B. Fluid resuscitation stops fluid extravasation into the interstitial space
    C. Escarotomy and fasciotomy are the same thing and refer to an incision made through a rigid eschar with the consistency of dry skin to stop compression phenomena
    D. Massive fluid accumulation in abdominal tissues can cause abdominal compartment syndrome

E. Fasciotomies are more commonly required for high-voltage electrical burns

23. Regarding respiratory support of the burn patient, the following are true:
    A. Patients with inhalation injuries frequently require larger volumes of intravenous fluid
    B. Excessive intravenous fluid resuscitation is indicated in acute respiratory distress syndrome
    C. Acute Respiratory Distress Syndrome is diagnosed by the 'frosted-glass' appearance on chest X-ray associated with clinical manifestations of worsening respiratory failure
    D. Patients with acute respiratory distress syndrome who need aggressive ventilatory support to combat hypoxemia
    E. Acute respiratory distress syndrome secondary to inhalation injury may progress to chronic respiratory failure

24. Eschar from the burn:
    A. Low risk of superinfection
    B. Increases fluid loss through evaporation
    C. May lead to an intense inflammatory reaction that can escalate to multiple organ failure and exitus
    D. Treated exclusively by conservative treatment
    E. Usually treated by surgical excision

25. Which of the following is true?
    A. Tangential excision involves removing the affected skin and subcutaneous tissue down to the underlying fascia with a scalpel or electrocautery.
    B. Fascial excision involves removing the affected skin and subcutaneous tissue down to the underlying fascia with a scalpel or electrocautery.
    C. The fascial excision is easy to perform, relatively bleeding-free and provides a good graft take rate, but it is mutilating
    D. Tangential excision of deep partial-thickness burns allows salvage of intact dermal elements, thus improving the grafting result.
    E. Limited burns of mixed or indeterminable thickness should be grafted immediately

26. Grafting in burns:
    A. It is never realized at the same time as burning
    B. Partial-thickness skin grafts are obtained by elliptical excision of skin from the groin or abdominal flanks (donor areas closed by suture).
    C. Full-thickness skin grafts are obtained by using a dermatome to harvest intact tegument down to the superficial dermis
    D. In the treatment of very large burns, the urgency to remove eschar often requires that excision must be performed even in the absence of donor sites available for grafting

E. To increase the coverage area, the skin can be expanded by perforating or multiple cutting and forming small fans

27. The following statements are true except:
    A. The skin surface is theoretically sterile for 24-48 hours after the burn
    B. Burn eschar is an ideal culture medium for germs
    C. Severe burn injuries are not accompanied by immunosuppression
    D. Sepsis starting from the burn is rarely fatal
    E. The first widely used effective antimicrobial was silver nitrate

28. Powerful systemic antibiotherapy and numerous topical agents have led to the emergence of the following multidrug-resistant germs:
    A. Methicillin-resistant Staphylococcus aureus
    B. Acinetobacter
    C. Vancomycin-resistant Enterococcus
    D. Methicillin-resistant Streptococcus
    E. Vancomycin-sensitive Enterococcus

29. Of the following infectious complications the most common in burn patients are:
    A. Pneumonia
    B. Urinary tract infections
    C. Spesis
    D. Tromboflebita
    E. Endometritis

30. Which of the following statements are true:
    A. As part of the hormonal response to burn trauma, the metabolic rate decreases
    B. Protein malnutrition both consumes respiratory muscles and compromises the immune system
    C. Enteral feeding is inferior to intravenous nutrition in burn patients
    D. A lipid-rich liquid diet is essential until oral feeding can be resumed properly
    E. Burn patients require aggressive nutritional support and close nutritional monitoring throughout the treatment phase of wound closure

31. * Ensuring a protein-rich basal diet (protein/kg body weight daily) in sufficient amounts to meet caloric requirements remains the most important principle in the nutritional management of these patients. The amount of protein(g)/kg body weight required is:
    A. a.1.5-2.0 g
    B. b.15-25g
    C. c.8-10g
    D. d.0.15-0.2g

E. e. 20-40g

32. Which of the following are the general goals of burn patient treatment?
    A. Infection prevention
    B. Pain relief
    C. Limiting fasciotomies for aesthetic reasons
    D. Facilitate optimal healing with minimal scarring
    E. Healing without scars

33. *A 45-year-old woman presents with superficial partial-thickness hot oil burns of the bilateral forearm and left thigh. Which of the following are NOT principles of treatment?
    A. Wash the wound thoroughly
    B. Oral antibiotics whether the sores are infected or not
    C. Removing broken flictena
    D. Daily burn assessment is not necessary
    E. Frequent reapplication of topical products

34. *A 45-year-old woman presents with deep partial-thickness hot oil burns of the bilateral forearm and grade III burns of the left thigh. Which of the following are NOT principles of treatment?
    A. Burns are initially covered with an antibiotic ointment and dressed
    B. All but small burns should be excised
    C. Burns that take more than 3 weeks to heal will form hypertrophic scars.
    D. Daily burn assessment is not necessary
    E. Wash the wound thoroughly

35. About the treatment of pain in burn patients the following are true:
    A. The oral route is preferred in the resuscitation phase
    B. The most commonly used painkillers for acute pain control in burns are opioids
    C. Morphine and fentanyl are the main anxiolytics used in the treatment of burn anxiety
    D. Nonsteroidal anti-inflammatory drugs can be used to relieve mild to moderate pain
    E. Medication always completely controls pain and anxiety

36. The following are true about toxic epidermal necrolysis:
    A. A rare, sometimes life-threatening exfoliative skin disorder
    B. NET is defined as <10% SC desquamation
    C. Dilantin and sulfonamide antibiotics are involved in 40% of all cases
    D. High-risk groups include patients with epileptic seizures, metastatic cancer, urinary tract infections, allogeneic bone marrow transplants and HIV infections
    E. It is caused by cell-mediated immune reactions leading to destruction of basal epithelial cells by CD8+ cells and macrophages in the superficial dermis

37. The following are true about toxic epidermal necrolysis:
    A. The Nikolsky sign, separation of the superficial epidermis at moderate digital pressure, is a rare finding
    B. There is a prodromal, flu-like phase consisting of fever and malaise
    C. A macular rash appears and spreads, often becoming confluent
    D. Oropharynx, eyes, and gastrointestinal tract are rarely involved
    E. Nonsteroidal anti-inflammatory drugs, some antibiotics, upper respiratory tract infections and viral diseases may be involved in triggering the disease

38. About the treatment in Toxic epidermal necrolysis the following are true:
    A. No immediate discontinuation of the triggering agent is required
    B. Skin biopsy of the skin at the edge of the area with flicans and adjacent free skin to distinguish NET/SSJ from infectious conditions
    C. Secondary skin infections are the leading cause of death
    D. Topical sulfamide superficial epidermal topical agents are generally used
    E. Eye damage is common and up to half of survivors are left with severe long-term sequelae

39. Factors associated with an increased risk of mortality in toxic epidermal necrolysis include:
    A. Age under 40
    B. Presence of malignancy
    C. Acidosis
    D. Heart rate less than 120 beats/minute
    E. Epidermal desquamation > I 0% SCT

ANSWERS CHAP. XIII – PLASTIC SURGERY

1 A, C, E
2 A, C, D
3 C, D, E
4 C
5 C, D, E
6 A, C, D, E
7 D
8 A, D
9 A, B, C, E
10 A, B, D, E
11 A, C, E
12 B, D, E
13 B, C, E
14 D
15 D
16 E
17 A, B, D
18 B, C, D
19 D
20 C
21 A, B, D, E
22 A, D, E
23 A, C, D, E
24 B, C, E
25 B, C, D
26 D, E
27 C, D
28 A, B, C
29 A, B, C, D
30 B, E
31 A
32 A, B, D
33 D
34 D
35 B, D
36 A, C, D, E
37 B, C, E
38 B, C, E
39 B, C, E

CHAP. XIV - VASCULAR SURGERY

1. Occlusion of the superficial femoral artery does not cause claudication at the level:
   A. Haluce
   B. Foot
   C. Thigh
   D. Leg
   E. Buttock muscles

2. Rest pain in peripheral arterial disease has the following meanings and characteristics:
   A. Frequently localized in the toes
   B. Relieving pain in a sloping position of the legs at the edge of the bed
   C. Predominantly daytime
   D. It represents an early stage of the disease
   E. Frequently occurs in the legs

3. Localized arterial disease distal to the knee is not typical in:
   A. Age 25-45 years
   B. Old age
   C. Smokers
   D. Early kidney failure
   E. Diabetes mellitus

4. Aorto-iliac arterial disease is characterized by:
   A. Buttock muscle atrophy
   B. Thigh muscle atrophy
   C. Claudication of calf muscles
   D. Brachial artery obstructions
   E. Bilateral popliteal artery stenosis

5. In peripheral arterial disease inspection of the lower limbs highlights:
   A. Ulcers
   B. Erythrosis of declivity
   C. Muscular atrophy
   D. Edem
   E. Proximal loss of pilosity

6. The blood flow from a moderate stenosis displayed on a Doppler machine may not look like the following:
   A. Trifazic
   B. Single-phase

C. Bifazic
D. Set
E. Deep Q waves

7. Specific symptoms of peripheral artery disease include:
   A. Degree of development of collateral circulation
   B. Number of arterial occlusions
   C. Myocardial infarction association
   D. Good patient tolerance of long walking distances
   E. Severity of arterial occlusion

8. There are no risks of the following angio-MRI and angio-CT:
   A. Dissection flap at puncture site
   B. Pseudo aneurysms at the puncture site
   C. Complication related to administration of the contrast substance
   D. Bleeding at the puncture site
   E. Exacerbation of kidney failure

9. Postoperative local complications of arterial bypass surgery :
   A. Bleeding from anastomoses
   B. Myocardial infarction
   C. Stroke
   D. Wound infection
   E. Chronic kidney failure

10. Less common causes of peripheral arterial disease are:
   A. Buerger's disease
   B. Cystic fibrosis
   C. Carotid atheromatosis
   D. Thrombocytopenia
   E. Iliac endofibrosis

11. The following statements about extra-anatomic bypasses are correct:
   A. Not indicated in hostile abdomen
   B. Can be axillo-femoral and femuro-femoral
   C. In critically ill patients this procedure is performed under general anesthesia only
   D. It is performed using synthetic prostheses tunneled from one artery to the other through subcutaneous cell tissue
   E. Their patency is higher compared to anatomic bypasses

12. The disadvantages of in situ saphenous vein bypass are:

A. Does not allow better size matching between artery and vein
B. Requires large incisions for bypass
C. Endothelial injury during valvulotome passage
D. Possibility to keep a valve cusp (retained valve)
E. Vein remains in normal anatomical position

13. Claudication:
A. Appears at rest
B. Pain precipitated by exercise
C. Improved at rest
D. Pain subsides during exercise
E. The pain is accompanied by high blood pressure

14. Ulcers caused by arterial insufficiency are:
A. Usually painful
B. The diabetic patient is in excruciating pain
C. Diabetics often have associated peripheral neuropathy as a result pain may be absent
D. Localized in the lower thigh
E. Common in young people

15. Diabetic ulcers are:
A. Nedureroase
B. Localized on the plantar surface of the foot
C. Localized on the medial aspect of the foot
D. Localized on the lateral side of the foot
E. Localized in pressure areas

16. Medical therapy includes:
A. Dyslipidemia control
B. Quitting smoking
C. Control of heart rate and cardiac contractility by beta-blocker administration
D. Treatment of hypertension
E. Vitamins

17. Atherectomy or plaque removal uses:
A. Rotary blades
B. Orbital blades
C. Laser energy
D. Contrast substance
E. Ultrasound

18. Thigh amputation is indicated:
    A. When ischemia is superficial
    B. Gangrene extends into the lower third of the calf
    C. Gangrene extends to the knee
    D. When ischemia is deep
    E. The leg is edematous

19. Antiplatelet medication:
    A. It is routinely used after any endovascular intervention
    B. Clopidogrel together with Plavix for at least 6 months
    C. Clopidogrel with aspirin for at least 4 months
    D. Clopidogrel with aspirin for at least 6 months
    E. Aspirin indefinitely

20. Ankle-brachial index:
    A. It is calculated by dividing the pressure at the ankle by the systolic arterial pressure at the femoral artery.
    B. It is calculated by dividing the pressure at the ankle by the systolic arterial pressure at the brachial artery.
    C. Normal value greater than 0.7
    D. IGB less than 0.4 is associated with rest pain or tissue damage
    E. Normal value greater than 0.9

21. *The greatest effect on the pressure difference distal to an arterial narrowing according to Poiseuille's Law is:
    A. Reducing the radius of the artery
    B. Blood volume
    C. Stenosis thickness
    D. Blood viscosity
    E. Flow speed

22. *The Doppler probe emits ultrasound with wavelengths between:
    A. 3-5Mhz
    B. 4-8Mhz
    C. 2-10Mhz
    D. 2.5-9.5Mhz
    E. 1-7.5Mhz
23. *The ankle-brachial index has a normal value of:
    A. 0,3
    B. 0,5
    C. Over 0.9

D. 0,2-0,5
E. 0,35

24. *The ankle-brachial index value associated with rest pain is:
A. 0,6
B. 0,8
C. Under 0.4
D. Under 0.7
E. 0,3-0,6

25. *The degree of narrowing of the vascular lumen from which pressure and blood flow decrease distal to the point of narrowing:
A. 50%
B. 20-30%
C. 20%
D. 10-15%
E. 35%

26. The following veins are part of the deep venous system of the lower limbs:
A. Peroneal veins
B. Anterior tibial veins
C. Posterior tibial veins
D. Large saphenous vein
E. Common femoral vein

27. Evaluation of hypercoagulable states in patients with idiopathic venous thrombosis is done by:
A. Protein C/S
B. Antithrombin II
C. CA 19
D. Factor V Leiden factor V dosing
E. CA-4

28. Prophylactic measures in the surgical patient:
A. Antibiotherapy
B. Taking acetylsalicylic acid
C. Subcutaneous heparin
D. Early mobilization
E. Intermittent segmental compression devices

29. Clinical presentation of pulmonary embolism:

A. Tachycardia
B. Bradycardia
C. Dyspnea, tachypnea
D. Hemoptysis
E. Pleuritic chest pain

30. Venous thrombolysis is contraindicated in:
A. Recent bleeding
B. Recent stroke
C. Thrombophilia
D. Recent trauma
E. Ischemic heart disease

31. In pulmonary embolism, thrombus can originate from:
A. Radial veins
B. Femoral veins
C. Large pelvic veins
D. Basilar veins
E. Iliac vein

32. The following veins are part of the central venous system:
A. Subclavicular vein
B. Inferior vena cava
C. Peroneal veins
D. Femoral veins
E. Posterior tibial vein

33. The differential diagnosis of deep vein thrombosis is made with:
A. Ruptured Baker's cyst
B. Lymphangitis
C. Lower limb trauma
D. Critical lower limb ischemia
E. Fournier Gangrene

34. Treatment of superficial torombophlebitis includes:
A. Hot packs
B. Elastic stockings
C. Low molecular weight heparin 4-6 weeks
D. Nonsteroidal anti-inflammatory drugs
E. Local ice

35. Symptoms caused by varicose veins:
    A. Feeling heavy and tired after prolonged orthostasis
    B. Night cramps
    C. Bleeding from superficial veins
    D. Excruciating pain
    E. Superficial thrombophlebitis

36. Saphenous vein stripping:
    A. The vein is only exposed at one end
    B. The vein is exposed at both ends
    C. The vein is ligated at the saphenofemoral junction
    D. The vein is ligated at the femurofemoral junction
    E. It is often used

37. Saphenous ligation:
    A. It is performed at the femoral vein at the level of the fossa ovalis
    B. This technique eliminates venous reflux
    C. The incidence of relapse is low compared to the stripping technique
    D. Indicated in patients with large proximal saphenous veins greater than 1.5 cm
    E. Indicated in patients with small proximal saphenous veins, less than 1.5 cm

38. Less invasive techniques include:
    A. Endovenous closure by radiofrequency ablation
    B. Saphenous vein stripping
    C. Ultrasound-guided foam sclerotherapy
    D. Mechano-chemical closure of the saphenous vein
    E. Saphenous ligation

39. Excision of venous collaterals through micro-incisions:
    A. Saphenous tributaries can be removed with small incisions
    B. The scars are very small
    C. Clamps are not used
    D. It's very painful
    E. Also called phlebectomy

40. Non-invasive vascular explorations include:
    A. Doppler ultrasonography
    B. MRI
    C. Scintigraphy
    D. Radiography
    E. CT

41. The building blocks of the Virchow Triad:
    A. Hypercoagulable states
    B. Ischemia
    C. Stop
    D. Hemophilia
    E. Venous endothelial lesions

42. Lipodermatosclerosis:
    A. Common in the calf
    B. Appears in the lower thigh
    C. Occurs in the area where the pressure is highest in orthostasis
    D. It is disabling
    E. Does not occur in mild forms

43. Venous disease is represented by:
    A. Teleangiectasis
    B. Venous ulcers
    C. Acute ischemia
    D. Post-thrombotic syndrome
    E. Varicose veins

44. Common causes of endothelial injury and DVT are:
    A. Bone trauma
    B. Limfangite
    C. Chronic ischemia
    D. Soft tissue trauma
    E. Subcutaneous infections

45. Superficial venous thrombosis causes:
    A. Edem
    B. Eritem
    C. Paleness
    D. Tenderness along the venous path
    E. Pruritus

46. The patient with DVT presents with:
    A. Edem
    B. Paleness
    C. Local pain
    D. Local temperature rise

E. Functional impotence

47. *The lifetime probability of an adult developing a venous ulcer is:
A. 35%
B. 12%
C. 4%
D. 6%
E. 2%

48. *Vinous vein disease is responsible for many unexpected deaths in hospitalized patients:
A. Deep vein thrombosis
B. Hydrostatic varicose veins
C. Acute myocardial infarction
D. Ischemic stroke
E. Superinfected venous ulcers

49. *The mortality rate in patients hospitalized for pulmonary thromboembolism is:
A. 4%
B. Exceeds 10%
C. Under 5 %
D. Over 50%
E. 15%

50. *Saphenous vein tributaries are best removed by:
A. Stripping
B. Laser therapy
C. Ligation of the saphenous vein at the femoral vein shave
D. Micro-incision phlebectomies
E. Radiofrequency ablation

51. *How many DVTs in hospital evolve asymptomatically?
A. Nearly 50%
B. Over 30%
C. 20-30%
D. 5%
E. 10%

ANSWERS CHAP. XIV - VASCULAR SURGERY

1 A, B, C, E
2 A, B
3 A, C, D
4 A, C
5 A, B, C
6 A, B, D, E
7 A, B, E
8 A, B, D
9 A, D
10 A, E
11 B, D
12 C, D
13 B, C
14 A, C
15 A, B, D, E
16 A, B, C, D
17 A, B, C
18 C, D
19 A, E
20 B, D, E
21 A
22 C
23 C
24 C
25 A
26 A, B, C, E
27 A, D
28 C, D, E
29 A, C, D, E
30 A, B, D
31 B, C, E
32 A, B
33 A, B, C
34 A, C, D
35 A, B, C, E
36 B, C
37 A, B, D
38 A, C, D
39 A, B, E
40 A, B, E
41 A, C, E
42 A, C
43 A, B, D, E
44 A, D
45 A, B, D
46 A, C
47 D
48 A
49 B
50 D
51 A

CAP. XV - ORTHOPEDICS

1. *What percentage of the total body mass is represented by bones, joints, muscles, tendons, ligaments, and the aponeurotic fascia:
   A. 75%
   B. 65%
   C. 85%
   D. 70%
   E. 60%

2. *What is the percentage of beds in surgical departments occupied by patients with hip fractures associated with postmenopausal osteoporosis?
   A. 25%
   B. 15%
   C. 35%
   D. 25%
   E. 20%

3. *Injury to which type of tissue determines the classification of a fracture as “open”?
   A. Connective
   B. Skin
   C. Vascular
   D. Nervous
   E. Bone

4. *Stress fractures and fractures on pathological bone usually have the following course:
   A. Oblique
   B. Spiral
   C. Comminuted
   D. Segmental
   E. Transversal

5. *A compression fracture means that the trabecular or spongy bone is crushed, and it often occurs at the level of:
   A. Vertebral bodies
   B. Proximal humerus
   C. Tibial diaphysis
   D. Peroneal malleolus
   E. Femoral neck

6. *A single radiographic view does not allow an accurate description of the fracture because:
   A. Radiography is a low sensitivity investigation
   B. Fractures occur in two dimensions
   C. Fractures occur in three dimensions
   D. Fractures are caused by high-energy trauma
   E. Radiographs may be damaged, leading to diagnostic errors

7. *In the case of open fractures, for lightly contaminated wounds, the following is administered:
   A. Intravenous second-generation cephalosporins
   B. Intramuscular penicillin
   C. Intravenous aminoglycosides
   D. Intravenous first-generation cephalosporins
   E. Oral tetracyclines

8. *Among the complications of external fixation of fractures, the following are included:
   A. Deep venous thrombosis
   B. Delayed healing
   C. Pulmonary thromboembolism
   D. Skin defects
   E. Nerve elongation

9. *Bones vulnerable to avascular necrosis are:
   A. Long bones
   B. Flat bones
   C. Small bones
   D. Bones covered by a large surface of articular cartilage
   E. Pelvic limb bones

10. *In 90% of traumatic dislocations, the humeral head is displaced:
    A. Anterior to the glenoid fossa
    B. Posterior to the glenoid fossa
    C. Superior to the acromion
    D. Inferior to the acromion
    E. Medial to the coracoid

11. *Evaluation for a steppage gait should be performed on all patients with:
    A. Meniscus injury
    B. Bimalleolar fracture
    C. Lumbar spondylosis

D. Tibial plateau fracture
E. Posterior hip dislocation

12. It can be stated that genu varum:
A. Affects the ankle joint
B. Creates a deformity in the shape of the letter "X"
C. Creates a deformity in the shape of parentheses
D. Affects the knee joint
E. Affects the hip joint

13. Among the stages of fracture healing, we encounter:
A. Formation of hard callus
B. Formation of semi-hard callus
C. Formation of soft callus
D. Formation of liquid callus
E. Formation of hematoma

14. Indications for internal fixation of a fracture may include:
A. Fractures in paraplegics
B. Fractures on pathological bone
C. Failure of non-operative reduction methods
D. Fractures where plaster immobilization cannot be applied
E. Metaphyseal fractures without displacement

15. Indications for external fixation of a fracture are:
A. Infected fractures
B. Unstable pelvic fractures
C. Open, unstable fractures
D. Trochanteric massif fractures
E. Proximal humerus fractures

16. Select mechanisms of bacterial infection of the bone:
A. Hematogenous dissemination from proximity
B. Contamination after a closed fracture
C. Dissemination by contiguity from an infectious focus
D. Dissemination by continuity from an infectious focus
E. After a surgical procedure applied to the bone

17. Pathognomonic elements of osteoarthritis are:
A. Localized narrowing of the joint space
B. Morning pain

C. Osteophytes
D. Night pain
E. Subchondral bone cysts

18. Ligaments found in the spine include:
A. Interspinous ligament
B. Infraspinous ligament
C. Supraspinous ligament
D. Yellow ligament
E. Anterior longitudinal ligament

19. The anterior drawer test of the knee is performed with:
A. Knee flexed at 30°
B. Knee flexed at 45°
C. Knee flexed at 60°
D. Anterior translation of the tibia
E. Anterior translation of the patella

20. The menisci play a role in:
A. Increasing the joint contact surface
B. Lubricating the joint
C. Nutrient supply to the hyaline cartilage
D. Healing ligament ruptures
E. Stiffening the joint

21. The Thompson test for the clinical diagnosis of Achilles tendon rupture is performed:
A. With the patient in the supine position
B. With the foot hanging freely at the edge of the table
C. With the patient in the prone position
D. With the patient in the lateral position
E. By squeezing the calf muscle

22. As Legg-Calvé-Perthes disease progresses, the following occur:
A. Resorption of necrotic bone tissue
B. Revascularization of the femoral head
C. Revascularization of the fibular head
D. Osteocondensation of the inner femoral condyle
E. Osteocondensation of the outer femoral condyle

23. A flexible form of scoliosis can be due to:
A. A muscle spasm near a herniated disc

B. A previous spinal trauma
C. Thoracic spondylosis
D. A poor posture
E. As a compensation for a shortened leg

24. The clinical picture at the onset of osteomyelitis is characterized by:
A. Sensation of joint instability
B. Severe pain near the end of a long bone
C. Protection of the affected limb
D. Avoidance of movement of the affected limb
E. Swelling of soft tissues

25. The treatment of rheumatoid arthritis targets:
A. Lifestyle change
B. Pain relief
C. Suppression of synovial inflammation
D. Prevention of joint deformities
E. Early joint reconstruction

26. The compartment syndrome may result from:
A. Decompensated painful gonarthrosis
B. Adhesive capsulitis of the shoulder
C. Severe muscle contusions
D. Crush syndrome
E. Fractures

27. The objectives of emergency surgery in pelvic fractures are:
A. Control of hemorrhage
B. Control of the urinary tract sphincter
C. Immediate restoration of walking
D. Enabling pulmonary recovery
E. Complete restoration of bone anatomy

28. In femoral diaphyseal fractures, osteosynthesis with an intramedullary nail reduces the risk of:
A. Venous thrombosis
B. Quadriceps contracture
C. Knee redo
D. Hip redo
E. Muscle atrophy

29. The most common hip fractures are:
    A. Subtrochanteric fracture
    B. Trochanteric-diaphyseal fracture
    C. Acetabular fracture
    D. Femoral neck fracture
    E. Intertrochanteric fracture

30. The rotator cuff muscles are:
    A. Subscapularis
    B. Supraspinatus
    C. Intraspinatus
    D. Infraspinatus
    E. Teres minor

31. The treatment of rotator cuff tendinitis consists of:
    A. Local cold applications
    B. Deep relaxation massage
    C. Rest
    D. Anti-inflammatory medication
    E. Concentric shoulder exercises

32. The lateral aspect of the ankle is supported by the following ligaments:
    A. Anterior collateral ligament
    B. Posterior talofibular ligament
    C. Posterior cruciate ligament
    D. Anterior talofibular ligament
    E. Calcaneofibular ligament

33. The following knee ligaments are extrasynovial:
    A. Anterior cruciate ligament
    B. Posterior cruciate ligament
    C. Medial collateral ligament
    D. Anterior collateral ligament
    E. Lateral collateral ligament

34. The most affected vertebral discs in a herniated disc are:
    A. L4-L5
    B. L2-L3
    C. T12-L1
    D. L5-S1
    E. L1-L2

35. Conservative treatment for back pain includes:
    A. Rest in the supine position on a soft surface
    B. Analgesics
    C. Anti-inflammatory drugs
    D. Strengthening exercises
    E. Traction

36. Causes of osteoporosis may include:
    A. Malignant diseases
    B. Nutritional deficiencies
    C. Excessive physical effort
    D. Repeated microtraumas
    E. Endocrine disorders

37. Osteoporosis and osteomalacia are similar in:
    A. Radiological appearance
    B. Blood test results
    C. Clinical presentation
    D. Mechanism of onset
    E. Treatment approach

38. The following tumors frequently metastasize to bone:
    A. Brain
    B. Rectum
    C. Breast
    D. Prostate
    E. Lungs

39. Multiple myeloma can cause:
    A. Bone pain
    B. Fever episodes
    C. Degenerative osteoarthritis
    D. Fatigue
    E. Fractures on pathological bone

40. Main characteristics of osteosarcoma include:
    A. Trimodal age distribution
    B. Night pain worsening
    C. Bimodal age distribution

D. Preferential location at the distal femoral metaphysis and proximal tibia
E. Slightly more frequent in women than men

41. Main characteristics of giant cell tumor include:
A. Pain and swelling around the joint
B. Appears typically in the 30-50 years age range
C. A benign tumor with low aggressiveness
D. Often located at the femoral epiphysis, radius, and tibia
E. Radiographic appearance of an eccentrically extending epiphyseal area

42. Which of the following statements are true:
A. The plantar fascia is a thick, fibrous structure attached to the calcaneus
B. The plantar fascia is a thin, elastic structure attached to the calcaneus
C. Inflammatory reactions in the plantar fascia produce a traction calcaneal exostosis, visible radiologically as a bony spur
D. Inflammatory reactions in the plantar fascia do not produce calcaneal exostosis
E. Contributing factors to plantar fasciitis include both flatfoot and high-arched foot

43. The following statements about Achilles tendon ruptures are true:
A. Achilles tendon ruptures occur in middle-aged athletes who stress the tendon beyond its tolerance
B. Achilles tendon ruptures occur in young sedentary individuals who stress the tendon beyond its tolerance
C. The Thompson test checks whether the gastrocnemius-soleus complex is intact
D. Surgical treatment of Achilles tendon ruptures is indicated in athletes
E. Surgical treatment of Achilles tendon ruptures is indicated in sedentary individuals

44. Bacteria can infect bone through the following mechanisms:
A. Through sexual contact
B. Hematogenous spread from a distant site
C. Contamination from an open fracture
D. As a result of surgical procedures applied to the bone
E. Contiguous spread from an infectious focus

45. When a bacterium is inoculated into a synovial joint, the secondary inflammatory process may cause:
A. Mild destruction of the articular cartilage
B. Slow destruction of the articular cartilage
C. Rapid destruction of the articular cartilage
D. Severe destruction of the articular cartilage
E. Bone remodeling

46. *The most common cause of septic tenosynovitis of the hand flexors is:

A. Streptococcus agalactiae
B. Streptococcus pneumoniae
C. Staphylococcus aureus
D. Klebsiella pneumoniae
E. Borrelia burgdorferi

47. Rheumatoid arthritis treatment aims at:
A. Pain relief
B. Early joint reconstruction
C. Late joint reconstruction
D. Prevention of joint deformities
E. Suppression of synovial inflammation

48. Osteoarthritis is:
A. Also known as degenerative joint disease
B. The most common form of arthritis affecting adults
C. Characterized by progressive thinning of the articular cartilage
D. Characterized by progressive thickening of the articular cartilage
E. A traumatic bone pathology

49. Osteomalacia is:
A. The result of an iron deficiency in the patient
B. The result of a deficiency in bone mineral content
C. Radiologically similar to osteoporosis
D. Caused by inadequate intake of vitamin D and calcium
E. Referred to as rickets in its pediatric form

50. The following statements about Paget's disease are true:
A. Characterized by excessive bone resorption
B. Patients report bone pain
C. Patients show progressive bowing of the lower limbs
D. Patients show a reduction in skull size
E. Patients’ bones have increased strength

51. *The following statements regarding hyperparathyroidism are true:
A. Hyperparathyroidism causes alopecia
B. Hyperparathyroidism causes diffuse bone osteopenia
C. Primary hyperparathyroidism is due to an adenoma or hyperplasia of the thyroid gland
D. Secondary hyperparathyroidism is due to prostate adenoma
E. Radiographically, hyperparathyroidism shows diffuse bone condensation

52. The following statements about dislocations are true:
    A. The knee is the most frequently dislocated joint
    B. The shoulder is the most frequently dislocated joint
    C. Posterior shoulder dislocation is a frequently missed diagnosis
    D. Shoulder dislocation reduction is achieved by gradual adduction of the shoulder with simultaneous traction applied by a bedsheet placed in the axilla and counter-traction on the arm
    E. Shoulder dislocation reduction is achieved by gradual abduction of the shoulder with traction on the arm and counter-traction from a bedsheet placed in the axilla
53. Hip fractures:
    A. Are caused by low-energy trauma in young patients
    B. Are caused by low-energy trauma in elderly patients and those with osteoporosis
    C. The pathognomonic clinical presentation: the affected limb is externally rotated and shortened
    D. Represent 33% of all orthopedic hospital admissions
    E. The pathognomonic clinical presentation: the affected limb is internally rotated, shortened, and adducted

54. The following statements are true:
    A. The femoral shaft is the strongest bone in the body
    B. In young patients, a femoral shaft fracture requires high-energy trauma
    C. In elderly patients, a femoral shaft fracture requires high-energy trauma
    D. In a closed femoral shaft fracture, 1–3 blood units can be lost into the thigh with the risk of hypovolemic shock
    E. Femoral shaft fractures have shockogenic and thrombogenic characteristics

55. *The following statements about tibial and fibular shaft fractures are false:
    A. Tibial shaft fractures are often open and contaminated
    B. The tibia’s reduced blood supply leads to pseudarthrosis and delayed healing in shaft fractures
    C. Closed reduction and above-knee cast immobilization are the standard treatment for uncomplicated, closed tibial and fibular shaft fractures
    D. Open reduction with wiring and above-knee cast immobilization is the standard treatment for uncomplicated, closed tibial and fibular shaft fractures
    E. The implant of choice for tibial shaft fractures is an intramedullary nail inserted after appropriate reaming
56. *In pelvic fractures associated with hemodynamic instability, a resuscitative measure is:
    A. Pelvic-foot plaster immobilization
    B. Retrograde urethrography to assess urethral integrity
    C. Emergency pelvic stabilization using an external fixator

D. Anticoagulant therapy
E. Pelvic MRI

57. A normal gait cycle:
A. Extends from heel strike of one foot to the next heel strike of the same foot
B. Extends from heel strike of one foot to the next toe strike of the same foot
C. The stance phase (60% of the cycle) occurs when the foot is in contact with the ground
D. The stance phase (60% of the cycle) occurs when the foot is off the ground
E. The swing phase is defined as the forward movement (pendulum) of the contralateral lower limb until heel strike

58. Gait is affected by abnormalities in the following joints:
A. Elbow joint
B. Metatarsophalangeal joints
C. Ankle joint
D. Metacarpophalangeal joints
E. Knee joint

59. The following statements about hip dislocation are true:
A. Hip dislocation commonly occurs during car accidents when the knee hits the dashboard
B. Hip dislocation commonly occurs from falling from standing height when the hip strikes a hard surface
C. Hip dislocation is not a medical-surgical emergency
D. In hip dislocation, the hip must be reduced urgently, and any associated fractures should be treated to restore hip joint stability
E. Delaying hip dislocation reduction by more than 8–12 hours increases the risk of avascular necrosis of the femoral head

60. Lumbar spinal stenosis results from the following degenerative changes:
A. Narrowing of the intervertebral disc
B. Hypertrophic development of facet joints
C. Buckling of the ligamentum flavum
D. Buckling of the anterior longitudinal ligament
E. Buckling of the interspinous ligament

61. *The imaging method of choice for spinal cord injuries is:
A. Plain radiograph
B. Myelography
C. MRI

D. Computed Tomography (CT)
E. CT myelography

62. Scoliotic deformity of the spine:
A. Represents a curvature of the spine in the frontal plane
B. Is always associated with deformities of the physiological curves in the sagittal plane
C. Is not always associated with vertebral rotation
D. Causes asymmetry of the rib cage
E. As the scoliotic curve progresses, the shape of the vertebrae and attached ribs changes

63. *Scoliosis is:
A. Most often congenital
B. Most often neuromuscular
C. Most often idiopathic
D. More common in boys
E. None of the above

64. Legg-Calvé-Perthes disease is:
A. A condition of the knee
B. A condition that occurs in children
C. Occurs more frequently in boys
D. Represents osteonecrosis of the femoral head
E. Of tuberculous etiology

65. *In a high-performance athlete with chronic groin pain, to detect an early stress fracture of the femoral neck, the recommended investigation is:
A. Bone scintigraphy with technetium pyrophosphate
B. Standard radiography of the hip joint
C. Two-view radiography (anteroposterior and lateral) of the hip joint
D. Hip ultrasound
E. Bone densitometry (DEXA)

66. Which of the following statements about rotator cuff tendinitis is NOT true:
A. It occurs primarily in those who perform repetitive forward flexion of the shoulder joint
B. Painful inflammatory changes can also affect the subacromial bursa
C. It is common in athletes (e.g., swimmers, throwers)
D. Computed tomography is the indicated technique for diagnosing this condition
E. Degenerative calcifications can develop in the rotator cuff tendons over time

67. In a patient diagnosed with lateral epicondylitis, possible contributing activities include:

A. Repetitive abduction movements of the shoulder joint
B. Repetitive manual work involving wrist extension
C. Athletes who play racquet sports
D. Repetitive manual work involving wrist flexion
E. Athletes who perform weightlifting sports

68. In a grade III acromioclavicular disjunction, the following ligamentous structures are torn:
A. Costoclavicular ligaments
B. Sternoclavicular ligaments
C. Coracoacromial ligament
D. Acromioclavicular ligaments
E. Coracoclavicular ligaments

69. Regarding supracondylar fractures of the humerus, the following statements are NOT true:
A. They occur from falls on an extended elbow
B. They are articular fractures involving the distal articular surface of the humerus
C. They are articular fractures involving the proximal articular surface of the humerus
D. They occur from falls on a flexed elbow
E. A complication of this fracture can be the development of painful pronation syndrome of the elbow

70. *Sprains are classified based on the severity of the lesion. Which of the following statements are true?
A. Sprains do not necessarily involve ligament damage
B. Grade I sprains show microscopic ligament injuries without joint instability when stress tested
C. Grade I sprains involve complete bundle ruptures with a firm endpoint on clinical testing
D. When ligament rupture causes joint instability, the lesion is classified as a grade II sprain
E. In grade II sprains, ligaments maintain microscopic continuity

71. Which of the following are contraindications to replantation?
A. Crush or avulsion amputation
B. Isolated amputation of the thumb distal to the middle phalanx
C. Isolated amputation of the second finger proximal to the middle phalanx
D. Amputation in elderly patients with comorbidities or mental disorders
E. Amputation at any level in children

72. Which of the following are NOT classic signs of compartment syndrome caused by tissue ischemia?
    A. Pain
    B. Sweating
    C. Pallor
    D. Paralysis
    E. Dizziness

73. The anterior and posterior drawer tests are used to evaluate the integrity of the anterior and posterior cruciate ligaments. Which of the following statements are true?
    A. Abnormal anterior tibial translation obtained by pulling the tibia forward with the knee flexed at 45° suggests rupture of the anteromedial fibers of the anterior cruciate ligament
    B. Abnormal anterior tibial translation obtained by pulling the tibia forward with the knee flexed at 45° suggests rupture of the anteromedial fibers of the posterior cruciate ligament
    C. Abnormal posterior tibial translation obtained by pulling the tibia backward indicates a posterior cruciate ligament injury
    D. Anterior laxity of the knee can be assessed using the Lachman test, performed with the knee flexed at 20°
    E. Anterior laxity of the knee can be assessed using the Lachman test, performed with the knee flexed at 45°.

74. Identify which of the following statements are true regarding the tissue of origin and the malignant or benign nature of the following tumors:
    A. Eosinophilic granuloma is a benign bone tumor of uncertain tissue origin
    B. Eosinophilic granuloma is a malignant bone tumor of uncertain tissue origin
    C. Eosinophilic granuloma is a benign bone tumor originating from bone marrow
    D. Enchondroma is a malignant bone tumor of uncertain tissue origin
    E. Enchondroma is a benign bone tumor originating from cartilaginous tissue

75. *Repeated submaximal stress can lead to microfractures, which, if not allowed to heal, will result in:
    A. Open fracture
    B. Pathologic bone fracture
    C. Stress fracture
    D. Greenstick fracture
    E. None of the above

76. *Local complications in the fracture healing process do not include:
    A. Infection

B. Delayed union
C. Pseudarthrosis
D. Sepsis
E. Malunion

77. *Systemic complications following a fracture do not include:
A. Shock
B. Malunion
C. Sepsis
D. Gas gangrene
E. Fat embolism

78. *Displacement in olecranon fractures is due to the contraction of the:
A. Biceps brachii
B. Brachialis
C. Triceps surae
D. Triceps brachii
E. E.Coracobrachialis

79. *The most frequently dislocated joint is the:
A. Shoulder
B. Elbow
C. Hip
D. Knee
E. Ankle

80. *The strongest bone in the body is:
A. Humeral diaphysis
B. Radial diaphysis
C. Femoral diaphysis
D. Patella
E. Tibial diaphysis

81. *Patellofemoral pain arises due to stress on the knee extensor mechanism, which consists of:
A. Sartorius muscle
B. Quadriceps muscle
C. Biceps femoris
D. Semimembranosus
E. Semitendinosus

82. *Which of the four ligaments stabilizing the knee is intra-synovial?
    A. Medial collateral ligament
    B. Lateral collateral ligament
    C. Posterior cruciate ligament
    D. Anterior cruciate ligament
    E. All of the above

83. *Absence of ankle plantar flexion during the Thompson test indicates rupture of the:
    A. Patellar tendon
    B. Quadriceps tendon
    C. Achilles tendon
    D. Anterior talofibular ligament
    E. Calcaneofibular ligament

84. *Which of the following is a benign bone tumor:
    A. Osteosarcoma
    B. Chondrosarcoma
    C. Fibrosarcoma
    D. Ewing's sarcoma
    E. Osteoid osteoma

85. Fractured bone fragments can be displaced by:
    A. Trauma force
    B. Dislocation
    C. Gravity
    D. Comorbidities
    E. Muscle traction

86. Local complications during the fracture healing process include:
    A. Infection
    B. Pseudarthrosis
    C. Venous thrombosis
    D. Malunion
    E. Avascular necrosis

87. Systemic complications following a fracture include:
    A. Delayed union
    B. Pseudarthrosis
    C. Shock
    D. Venous thrombosis
    E. Fat embolism

88. The four muscles of the rotator cuff are:
    A. Subscapularis
    B. Supraspinatus
    C. Infraspinatus
    D. Teres major
    E. Teres minor

89. The lateral ligaments of the ankle are the most frequently affected ligaments in the body. These are:
    A. Deltoid ligament
    B. Anterior talofibular ligament
    C. Posterior talofibular ligament
    D. Calcaneofibular ligament
    E. Achilles tendon

90. Which of the following are used to assess the integrity of the anterior cruciate ligament (ACL):
    A. McMurray test
    B. Anterior drawer test
    C. Varus test
    D. Valgus test
    E. Lachman test

91. Which of the following joints are part of the shoulder complex:
    A. Glenohumeral
    B. Proximal radioulnar
    C. Acromioclavicular
    D. Sternoclavicular
    E. Scapulothoracic

92. Bacteria can infect bone through one of the following mechanisms:
    A. Lymphatic spread from a distant site
    B. Hematogenous spread from a distant site
    C. Contamination from an open fracture
    D. Following a surgical procedure on the bone
    E. Contiguous spread from an adjacent infection

93. The following are malignant tumors:
    A. Osteosarcoma
    B. Osteoid osteoma

C. Chondrosarcoma
D. Osteochondroma
E. Ewing's sarcoma

94. The following are benign tumors:
A. Fibrosarcoma
B. Osteoid osteoma
C. C.Enchondroma
D. D.Chondrosarcoma
E. E.Ewing's sarcoma

95. The following statements about fractures are true:
A. Fracture location is not important for healing and treatment
B. Cortical, diaphyseal bone heals more slowly
C. The fracture line suggests the amount of kinetic energy absorbed
D. Stress and pathologic fractures usually have a spiral trajectory
E. Spiral or oblique fractures result from rotational and torsional trauma

96. The stages of fracture healing include:
A. Hematoma formation (2 - 24 months)
B. Inflammation and cell proliferation (hours to weeks)
C. Soft callus formation (2 days - 6 weeks)
D. Hard callus formation (10 days - 4 months)
E. Bone remodeling (immediate)

97. Internal fixation devices for fractures include:
A. Pins
B. Screws
C. Plates
D. Intramedullary nails
E. Continuous traction

98. Common complications due to inadequate initial treatment of scaphoid fractures include:
A. Avascular necrosis
B. Gas gangrene
C. Pseudarthrosis
D. Fat embolism
E. Malunion

99. The following statements about hip fractures are true:

A. Hip fractures caused by low-energy trauma are common in the elderly and in those with osteoporosis
B. They represent 3% of total hospital admissions in orthopedic centers
C. The most common types of hip fractures are femoral neck and intertrochanteric fractures
D. The affected lower limb is externally rotated and shortened
E. Surgical treatment does not allow early mobilization and does not reduce complications related to prolonged bed rest

100. The following statements about tibial and fibular shaft fractures are not true:
   A. Diaphyseal fractures of the tibia and fibula occur 9 times more frequently than femoral shaft fractures
   B. Tibial fractures are rarely open and contaminated
   C. Poor tibial vascularization leads to pseudarthrosis and delayed union
   D. Tibial fractures have a low risk of compartment syndrome
   E. Complications from inadequate treatment of tibial fractures are the most common cause of malpractice claims in orthopedic trauma surgery

101. The classic signs of compartment syndrome caused by tissue ischemia are:
   A. Pain
   B. Paresthesia
   C. Hyperthermia
   D. Paralysis
   E. Pallor

102. Factors contributing to rotator cuff pain include:
   A. Glenohumeral joint stability
   B. Muscle weakness
   C. Muscle imbalance
   D. Correct throwing technique
   E. Intensive training

103. Contributing factors to plantar heel pain include:
   A. Flat foot
   B. High-arched foot
   C. Running on toes or sand
   D. Underweight
   E. Proper footwear

104. Options for soft tissue autografts in ACL reconstruction include:
   A. Patellar tendon

B. Semitendinosus tendon
C. Semimembranosus tendon
D. Gracilis tendon
E. Fascia lata

105. The following statements about Legg-Calvé-Perthes disease are true:
A. It represents osteonecrosis of the humeral head in children aged 4-8 years
B. The male to female ratio is 1:8
C. Symptoms may be located in the medial knee area, innervated by the obturator nerve
D. Decreased abduction strength is reflected by a Trendelenburg gait
E. The disease has a limited course, lasting between 2 and 4 years

106. Which of the following statements about scoliosis are false:
A. Scoliosis is a curvature of the spine and may be flexible (correctable) or fixed (structural)
B. Scoliosis secondary to neurofibromatosis is caused by several vertebral formation abnormalities
C. In most cases, scoliosis is idiopathic
D. Boys are affected 9 times more often than girls
E. Severe thoracic spinal curves may impair cardiopulmonary function

107. The following statements about acute hematogenous osteomyelitis are true:
A. It most commonly occurs in children
B. It is caused by hematogenous spread from another distant infection site
C. Up to age 3, infections with Haemophilus Influenzae are common
D. Onset is slow
E. White blood cell count and erythrocyte sedimentation rate are usually low

108. The following are late complications of hematogenous osteomyelitis:
A. Severe pain near the end of a long bone
B. Septicemia
C. Development of chronic persistent or recurrent osteomyelitis
D. Pathologic bone fractures
E. Growth disturbances due to epiphyseal plate involvement

109. Radiological signs pathognomonic for osteoarthritis include:
A. Localized narrowing of the joint space
B. Widening of the joint space
C. Subchondral bone sclerosis
D. Osteophytes

E. Subchondral bone cysts

110. Surgical bone procedures used in the treatment of osteoarthritis include:
    A. Osteosynthesis
    B. Osteotomy
    C. Partial arthroplasty
    D. Total arthroplasty
    E. Arthrodesis

111. Clinical manifestations of L4 nerve root radiculopathy include:
    A. Pain and paresthesia on the medial side of the foot and ankle
    B. Hypoesthesia of the dorsum of the foot and big toe
    C. Weakness of the extensor hallucis longus
    D. Decreased patellar reflex
    E. Decreased Achilles reflex

112. Clinical manifestations of C7 nerve root radiculopathy include:
    A. Hypoesthesia on the lateral side of the arm
    B. Weakness of finger extension and triceps brachii
    C. Weakness of finger flexion
    D. Decreased biceps reflex
    E. Decreased triceps reflex

113. Endocrine disorders causing osteoporosis include:
    A. A.Hypogonadism
    B. B.Hyperparathyroidism
    C. C.Hypothyroidism
    D. D.Cushing’s disease
    E. E.Hyperthyroidism

114. Characteristics of osteoid osteoma include:
    A. Pain often relieved by aspirin
    B. Asymptomatic, except for pathologic fracture
    C. Occurs under age 30
    D. Occurs between ages 45–65
    E. Radiologically shows a radiolucent area <1 cm surrounded by dense sclerosis

115. Treatment of bone tumors includes:
    A. Surgical treatment
    B. Chemotherapy
    C. Radiotherapy

D. Physiotherapy
E. Physical therapy

ANSWERS CHAP. XV - ORTOPEDICS

1	D	40	B, C, D	79	A
2	E	41	A, D, E	80	C
3	B	42	A, C, E	81	B
4	E	43	A, C, D	82	D
5	A	44	B, C, D, E	83	C
6	C	45	C, D	84	E
7	D	46	C	85	A, C, E
8	B	47	A, B, D, E	86	A, B, D, E
9	D	48	A, B, C	87	C, D, E
10	A	49	B, C, D, E	88	A, B, C, E
11	E	50	A, B, C	89	B, C, D
12	C, D	51	B	90	B, E
13	A, C, E	52	B, C, E	91	A, C, D, E
14	A, B, C, D	53	B, C, D	92	B, C, D, E
15	A, B, C	54	A, B, D, E	93	A, C, E
16	C, E	55	D	94	B, C
17	A, C, E	56	C	95	B, C, E
18	A,C, D, E	57	A, C, E	96	B, C, D
19	B, D	58	B, C, E	97	A, B, C, D
20	A, B, C	59	A, D, E	98	A, C, E
21	B, C, E	60	A, B, C	99	A, C, D
22	A, B	61	C	100	B, D
23	A, D, E	62	A, D, E	101	A, B, D, E
24	B, C, D	63	C	102	B, C, E
25	B, C, D, E	64	B, C, D	103	A, B, C
26	C, D, E	65	A	104	A, B, D, E
27	A, D	66	A, D	105	C, D, E
28	A, B, C, E	67	B, C	106	B, D
29	D, E	68	D, E	107	A, B, C
30	A, B, D, E	69	B, C, D, E	108	C, D, E
31	C, D	70	B	109	A, C, D, E
32	B, D, E	71	A, C, D	110	B, C, D, E
33	B, C, E	72	B, E	111	A, D
34	A, D	73	A, C, D	112	B, E
35	B, C, D, E	74	C, E	113	A, B, D, E
36	A, B, E	75	C	114	A, C, E
37	A, C	76	D	115	A, B, C
38	C, D, E	77	B		
39	A, D, E	78	D		

CHAP. XVI - UROLOGY

1. *The most common site of origin for prostate cancer is:
   A. Peripheral zone of the prostate
   B. Transitional zone of the prostate
   C. Central zone of the prostate
   D. Anterior fibromuscular stroma
   E. Verumontanum

2. *Most men with early-stage prostate cancer:
   A. Are young, under the age of 40
   B. Present with dysuria
   C. Present with hematuria
   D. Present with nocturia
   E. Are asymptomatic

3. *Prostate-specific antigen (PSA) is generally considered normal when:
   A. Greater than 10 ng/ml
   B. Less than 4 ng/ml
   C. 10–15 mg/ml
   D. Less than 4 mg/ml
   E. Greater than 10 mg/ml

4. *The mainstay of treatment for metastatic prostate cancer is:
   A. Androgen deprivation therapy
   B. Brachytherapy
   C. External pelvic radiotherapy
   D. Radical prostatectomy with ilio-obturator lymphadenectomy
   E. Radical prostatectomy without lymphadenectomy

5. *The tumor marker specific to clear cell renal carcinoma is:
   A. PSA
   B. Alpha-fetoprotein
   C. Beta-HCG
   D. CA-125
   E. It has no specific marker

6. *Less than 10% of circulating androgens are produced by the:
   A. Testes
   B. Pituitary gland
   C. Adrenal glands

D. Hypothalamus
E. Prostate

7. *The prostate receives its vascular supply from the:
A. Aorta
B. Internal iliac artery
C. Superior mesenteric artery
D. Pudendal artery
E. Popliteal artery

8. *Acute prostatitis is:
A. A bacterial infectious condition
B. A fungal infectious condition
C. A viral infectious condition
D. A parasitic infectious condition
E. A genetic disorder

9. *Prostate-specific antigen (PSA):
A. Is a serine protease that cleaves post-ejaculatory seminal proteins
B. May be decreased in prostatitis
C. Is considered normal below 40 ng/ml
D. Has six dominant isoforms
E. A free/total PSA ratio below 20–25% is associated with bladder lithiasis

10. *Regarding kidney anatomy, the correct statement is:
A. They are tubular organs
B. They are intraperitoneal
C. They are perpendicular to the lumbar spine
D. They are paired organs
E. The left kidney is in contact with the duodenum

11. *Which of the following penile lesions are considered premalignant?
A. Leukoplakia
B. Bowen’s disease
C. Condyloma acuminata
D. Erythroplasia of Queyrat
E. All of the above

12. *Phimosis is defined as:
A. Fibrotic relaxation of the preputial skin
B. Inability to retract the foreskin over the glans
C. Inability to reposition the foreskin after retraction
D. Presence of a scar at the level of the tunica albuginea
E. A prolonged erection

13. *Urethral strictures are:
    A. Most commonly caused by urethritis due to gonorrhea
    B. Most commonly caused by Mycoplasma urealyticum
    C. Caused by gonococcal urethritis
    D. Diagnosed through ureteroscopy
    E. Treated with alpha-blockers

14. *Bacterial cystitis:
    A. Fever is a constant symptom
    B. Frequently presents with costovertebral angle tenderness
    C. Is common in men
    D. Women are predisposed to recurrent infections
    E. E. coli causes more than 20% of all urinary tract infections

15. *Urinary incontinence is:
    A. Voluntary loss of urine
    B. Stress incontinence occurs with decreased intra-abdominal pressure (e.g., laughing, coughing)
    C. Urge incontinence is an obstructive symptom
    D. Total incontinence occurs in vesicovaginal fistulas
    E. An upper urinary tract infection

16. *Risk factors for urinary lithiasis include:
    A. Renal tubular acidosis
    B. Hyperparathyroidism
    C. Dehydration
    D. Family history of urolithiasis
    E. All of the above

17. *In localized prostate cancer in a patient with life expectancy under 10 years, the appropriate management is:
    A. Active surveillance
    B. Radical prostatectomy
    C. Radiotherapy
    D. Chemotherapy
    E. Watchful waiting

18. *Benign prostatic hyperplasia primarily originates in the:
    A. Peripheral zone
    B. Anterior zone
    C. Central zone
    D. Transitional zone
    E. Fibromuscular zone

19. *In acute prostatitis complicated by urinary retention, the recommended intervention is:
A. Urethral catheterization
B. Cutaneous urostomy
C. Nephrostomy
D. Suprapubic catheterization
E. Cystoscopy

20. *The first-line pharmacologic treatment of benign prostatic hyperplasia includes:
A. Antiandrogens
B. Antimuscarinics
C. Alpha-adrenergic blockers
D. 5-alpha-reductase inhibitors
E. Anticholinergics

21. Which of the following statements regarding acute prostatitis are true?
A. The causative agent is often unidentified
B. It may have a bacterial etiology
C. The most common pathogens are Gram-negative bacteria
D. Escherichia coli is the most frequently implicated bacterium
E. The most common pathogens are Gram-positive bacteria

22. Finasteride and dutasteride:
A. Are used in the treatment of symptomatic benign prostatic hyperplasia
B. Are alpha-blockers
C. Are 5-alpha reductase inhibitors
D. Significantly reduce prostate volume (by 60–70%)
E. Usually increase serum PSA levels

23. Which of the following statements regarding prostate biopsy are true?
A. It is almost always performed via the perineal route
B. Typically 2–4 cores are collected
C. Usually 10–14 cores are collected
D. Accurate needle placement is aided by transrectal ultrasonography
E. Pre- and post-procedural antibiotic therapy is contraindicated

24. Which of the following statements about clear cell renal carcinoma are true?
A. Usually originates from the collecting ducts
B. Nitrosamines and tobacco smoke are implicated in its pathogenesis
C. Hematuria is the most common clinical sign
D. May present with nonspecific symptoms
E. In advanced stages, the tumor invades the renal vein and inferior vena cava

25. Bladder cancer:
A. Most commonly presents as transitional cell carcinoma

B. Chronic bladder inflammation may lead to squamous cell carcinoma
C. In stages Ta and T1, transurethral resection alone is often sufficient
D. BCG is highly effective for stage T2 tumors
E. Muscle-invasive tumors typically require radical cystectomy

26. Obstructive acute pyelonephritis:
A. Is a urological emergency
B. Antibiotic therapy without relieving the obstruction is sufficient
C. Stone removal is the first-line intervention
D. The goal of emergency intervention is to relieve the obstruction
E. Urinary drainage is achieved using a double-J stent or percutaneous nephrostomy

27. Which of the following statements regarding renal trauma are true?
A. The majority (70–80%) are blunt injuries
B. Hemodynamically unstable patients are evaluated with CT scan
C. Conservative management is preferred if the patient is stable
D. Minor renal contusions are the most frequently encountered
E. Major lacerations involve the renal capsule and corticomedullary junction

28. Medical management of benign prostatic hyperplasia may include:
A. Alpha-1 adrenergic blockers
B. 5-alpha reductase inhibitors
C. Combination therapy of alpha-1 blocker and 5-alpha reductase inhibitor
D. Intravesical BCG
E. Thiotepa

29. Which of the following statements regarding prostate cancer are true?
A. Serum PSA only partially correlates with disease extent
B. Metastatic prostate cancer typically affects the lungs
C. Metastatic prostate cancer typically affects the liver
D. Prostate cancer is initially androgen-independent
E. Chemical castration is achieved with LHRH analogues

30. Which of the following statements about localized prostate cancer are true?
A. Watchful waiting may be indicated for patients with life expectancy under 10 years
B. Active surveillance is preferred for patients with life expectancy over 10 years and Gleason score above 8
C. Cryotherapy is used in selected centers
D. Radical prostatectomy and radiotherapy are potentially curative treatments
E. PSA elevation is common in the first 6 months post-treatment

31. Regarding priapism, the following statements are true:
A. Unlike physiological erection, only the corpus spongiosum is engorged
B. Untreated priapism can lead to erectile dysfunction due to corpus spongiosum fibrosis

C. Treatment in sickle cell-related priapism includes hydration, analgesia, and alkalinization
D. High-flow priapism is managed with selective embolization
E. First-line treatment for drug-induced priapism includes aspiration of blood from the corpora cavernosa

32. Which of the following penile pathologies constitute surgical emergencies?
A. Phimosis
B. Paraphimosis
C. Priapism
D. Peyronie's disease
E. Penile fracture

33. Regarding testicular torsion, the following statements are true:
A. Torsion is intravaginal in adolescence
B. Torsion is extravaginal in neonates
C. Color Doppler ultrasound should be performed if the diagnosis is uncertain
D. Irreversible testicular damage may occur within four hours
E. Blue dot sign is found on physical exam

34. Which of the following statements about bladder trauma are true?
A. Cystography is the most accurate imaging test for diagnosing bladder rupture
B. Urethrography is required if concurrent urethral injury is suspected
C. Bladder ruptures rarely cause hematuria
D. Urethral injury should be suspected in pelvic fractures
E. Small extraperitoneal ruptures may be managed with Foley catheter drainage for 1–2 weeks

35. Which of the following statements about bladder tumors are true?
A. Radical cystectomy in men involves removal of the bladder and prostate only
B. Perivesical fat invasion defines stage T3
C. Intravesical BCG is most frequently used to prevent recurrence in stage T1 tumors
D. Surveillance protocols for Ta and T1 tumors include cystoscopy and urinary cytology
E. BCG is very effective in treating carcinoma in situ (Tis)

36. Which of the following statements regarding urinary stone treatment are true?
A. Treatment choice depends on the size and location of the stones
B. Ureteral stones <5 mm generally require ureteroscopy
C. Percutaneous nephrolithotomy is a valid option for multiple renal stones
D. Medical treatment of uric acid stones includes urinary alkalinization and increased fluid intake
E. Uric acid stones dissolve in acidic urine

37. Compared to open radical prostatectomy, robotic and laparoscopic prostatectomy offer:
    A. Reduced risk of blood transfusions
    B. Shorter recovery time
    C. Faster patient mobilization
    D. Quicker return of urinary continence
    E. Easier intraoperative dissection

38. Effective therapies for metastatic prostate cancer include:
    A. Bilateral orchiectomy
    B. Transurethral resection of the prostate cancer
    C. Brachytherapy
    D. Medical castration
    E. Estrogen therapy

39. Common causes of renal trauma include:
    A. Road traffic accidents
    B. Occupational accidents
    C. Falls from standing height
    D. Accidental falls
    E. Contact sports

40. In major renal lacerations, as opposed to minor injuries, findings include:
    A. Renal contusions
    B. Cortical renal ruptures
    C. Urinary extravasation
    D. Extensive perirenal hematoma
    E. Corticomedullary renal rupture

41. The classic triad of signs associated with renal tumors includes:
    A. Anemia
    B. Hematuria
    C. Fever
    D. Palpable abdominal mass
    E. Flank pain

42. Renal colic is commonly associated with:
    A. Fever
    B. Nausea
    C. Intermittent flank pain
    D. Hypogastric pain
    E. Vomiting

43. First-line treatment in obstructive acute pyelonephritis due to calculi includes:
    A. Renal drainage via ureteral stent
    B. Removal of the obstructive stone
    C. Percutaneous nephrostomy
    D. Antibiotic therapy
    E. Mobilization of the obstructing stone

44. The following signs and symptoms are suggestive of bladder rupture trauma:
    A. Macroscopic hematuria
    B. Pyuria
    C. Moderate pelvic pain
    D. Inability to void
    E. Severe suprapubic pain

45. Benign prostatic hyperplasia:
    A. Causes subvesical obstruction
    B. Produces obstructive symptoms (frequency, urgency, nocturia)
    C. Produces irritative symptoms (dysuria, terminal dribbling, weak urinary stream)
    D. Produces obstructive symptoms (dysuria, terminal dribbling, weak urinary stream)
    E. Produces irritative symptoms (frequency, urgency, nocturia)

46. In surgical treatment of benign prostatic hyperplasia:
    A. Transurethral resection of the prostatic adenoma is performed
    B. Open surgery is used for prostates >50 grams
    C. Transurethral approach is the least commonly used
    D. Retroperitoneal approach is performed
    E. Surgical removal of prostatic tissue is done via open, robotic, or transurethral approach

47. The following statements regarding prostate adenocarcinoma are true:
    A. Incidence increases with age
    B. Digital rectal examination is an important diagnostic method
    C. PSA is the cornerstone of prostate cancer screening
    D. Prostate cancer always begins with weight loss, ureteral obstruction, and macroscopic hematuria
    E. Radical prostatectomy is performed via a retropubic approach

48. Clear cell renal carcinoma:
    A. Originates from the proximal convoluted tubules
    B. Has a higher incidence in males (male-to-female ratio 2:1)
    C. Is often diagnosed incidentally
    D. Hematuria is the least common clinical sign
    E. Flank pain and palpable mass may be signs of disease

49. Renal colic is characterized by:
    A. Flank pain radiating to the external genitalia
    B. Continuous pain
    C. May be accompanied by nausea and vomiting
    D. Pain is controlled with small doses of analgesics
    E. The pain is caused by obstruction from a calculus

50. The following aspects are assessed during cystoscopy:
    A. Position and configuration of ureteral orifices
    B. Entire bladder mucosa for tumor lesions
    C. Proximal ureters
    D. Renal calyces
    E. Color of urine expelled from ureteral orifices into the bladder

51. The following statements about renal trauma are true:
    A. Caused by motor vehicle accidents or falls from height
    B. Hematuria is a clinical sign
    C. CT scan is used in the evaluation of stable patients
    D. Blunt injuries account for 5–10% of all renal trauma
    E. Conservative treatment is preferred in hemodynamically unstable patients

52. The following statements about benign renal tumors are true:
    A. Most cystic lesions are benign
    B. Complex cysts require further investigation
    C. Angiomyolipoma is usually diagnosed via CT
    D. Simple renal cysts are treated with nephrectomy
    E. Most renal cysts require mandatory biopsy for diagnosis

53. In bladder carcinoma:
    A. Gross hematuria is a common symptom
    B. Higher prevalence is seen among smokers
    C. Treatment includes transurethral tumor resection +/- intravesical chemo/immunotherapy
    D. Periodic cystoscopy is not required
    E. Non-muscle-invasive tumors are treated with cystectomy

54. Testicular torsion is characterized by:
    A. Loss of cremasteric reflex
    B. Intravaginal torsion occurs frequently in adolescence
    C. The testicle is swollen and painful
    D. The testicle may be positioned high
    E. Differential diagnosis includes umbilical hernia

55. In scrotal infections:
    A. Gram-positive bacteria are usually involved
    B. Necrotizing fasciitis may progress to Fournier's gangrene
    C. Without surgical treatment, the condition can be fatal
    D. Broad-spectrum antibiotic therapy is not required
    E. Wide debridement and excision of devitalized tissue is not indicated

56. The following statements about testicular cancer are false:
    A. Includes germ cell and non-germ cell tumors
    B. Differential diagnosis includes varicocele, hydrocele, and spermatocele
    C. Tumor markers should not be measured
    D. Treatment is exclusively medical
    E. PSA measurement is mandatory

57. Which of the following statements regarding male infertility are true?
    A. Involves evaluation of external male genitalia
    B. Requires semen analysis (spermogram)
    C. Childhood diseases (e.g., mumps) should be assessed
    D. History should include possible toxic exposures
    E. Presence of varicocele should not be documented

58. Erectile dysfunction may be caused by:
    A. Vasculogenic disorders
    B. Psychological factors
    C. Endocrinological syndromes
    D. Neurogenic causes
    E. PDE-5 inhibitor abuse

59. In the treatment of ureteral lithiasis:
    A. Obstructive pyelonephritis does not require stent placement
    B. Ureteral stones under 5 mm usually pass spontaneously
    C. Ureteral stents actively dilate the ureter
    D. Treatment may include flexible or rigid ureteroscopy
    E. ESWL (extracorporeal shock wave lithotripsy) may be used

60. Bladder exstrophy is characterized by:
    A. Complete development of the anterior bladder wall
    B. Exposure of the posterior bladder wall through the abdominal wall
    C. High prevalence
    D. Associated with total incontinence
    E. Increased risk of bladder adenocarcinoma

ANSWERS CHAP. XVI – UROLOGY

1 A
2 E
3 B
4 A
5 E
6 C
7 B
8 A
9 A
10 D
11 E
12 B
13 C
14 D
15 D
16 E
17 E
18 D
19 D
20 C
21 A, B, C, D
22 A, C
23 C, D
24 B, C, D, E
25 A, B, C, E
26 A, D, E
27 A, C, D, E
28 A, B, C
29 A, B, E
30 A, C, D
31 C, D, E
32 B, C, E
33 A, B
34 A, D, E
35 B, C, D, E
36 A, C, D
37 A, B, D, E
38 A, D, E
39 A, B, E
40 C, D, E
41 B, D, E
42 B, C, E
43 A, C, D
44 A, D, E
45 A, D, E
46 A, E
47 A, B, C, E
48 A, B, C, E
49 A, C, E
50 A, B, E
51 A, B, C
52 A, B, C
53 A, B, C
54 A, B, C, D
55 A, B, C
56 C, D, E
57 A, B, C, D
58 A, B, C, D
59 B, D, E
60 B, D, E

CHAP. XVII – E.N.T

1 *Which of the following is not a risk factor for otitis media with effusion:
A. Nursery
B. Recent upper respiratory tract infection
C. Bottle feeding
D. A high number of siblings at home
E. Female gender

2 *Which pathology is not included in the etiologic differential diagnosis of facial palsy:
A. Bell's palsy
B. Acute otitis media
C. Globus pharyngeus
D. Herpes zoster oticus
E. Lyme disease

3 *In its early stages, otosclerosis produces:
A. Acquired conductive hypoacusia
B. Central facial palsy
C. Peripheral facial palsy
D. Auricular suppuration
E. Tympanic perforation

4 *Untreated acute otitis media can progress to, except:
A. Mastoiditis
B. Meningitis
C. Cerebral abscess
D. Trigeminal paralysis
E. Labyrinthitis

5 *Which of the following anomalies can lead to significant deformations of the ear with the absence of the auricular pavilion, the external auditory canal, or the structures of the middle or inner ear:
A. Major anomalies of the first branchial arch
B. Major anomalies of the second branchial arch
C. Major anomalies of the third branchial arch
D. Major anomalies of the fourth branchial arch
E. Major anomalies of the fifth branchial arch

6 * Branchial arch anomalies can present in the form of all of the following except:
A. Trunks

B. Cysts
C. Sinuses
D. Fistulas
E. Cartilaginous fragments

7 *Approximately 80% of benign salivary gland tumors are:
A. Pseudomyxomas
B. Epithelial tumors
C. Mixed tumors or pleomorphic adenomas
D. Seromas
E. Carcinomas

8 *Which of the following statements is correct:
A. Benign lymphomas represent the most common benign cervical pathology among children and young adults,
B. Malignant lymphomas represent the rarest malignant cervical pathology among children and young adults,
C. Malignant lymphomas represent the most common malignant cervical pathology among adults and the elderly,
D. Malignant lymphomas represent the most common malignant cervical pathology among children and young adults,
E. Malignant lymphomas represent the most common malignant cranial pathology among children and young adults.

9 *In small children, cricothyrotomy is not possible, so the airway is best secured by:
A. Tracheotomy at the immediate supracricoid level,
B. Tracheotomy at the immediate thyroid level,
C. Tracheotomy at the immediate hyoid level,
D. Tracheotomy at the immediate subcricoid level,
E. Tracheotomy at the immediate suprahyoid level.

10 *Which statement is false?
A. The arytenoid cartilage is a paired cartilage.
B. The thyroid cartilage is an unpaired cartilage.
C. The cricothyroid membrane is well developed in children.
D. The larynx occupies the central compartment of the neck.
E. The larynx has muscular connections to the base of the skull.

11 *Which statement is false?
A. The vocal process of the arytenoid is located medially.
B. The lymphatic drainage of the larynx depends on its location.

C. The laryngeal framework consists of nine cartilaginous structures.
D. The paired arytenoid cartilages are pyramid-shaped with three surfaces and articulate inferiorly with the thyroid cartilage.
E. The epiglottis is an anterior, leaf-shaped structure overlapping the superior laryngeal orifice.

12 *Identify the statement that does not represent a primary function of the larynx:
A. Respiration
B. Airway protection
C. Phonation
D. Swallowing
E. Production of the primary voice

13 *During swallowing, the following events occur, except:
A. The larynx acts as a valve.
B. The airway is closed, thus preventing aspiration.
C. Before the food bolus reaches the larynx, the extrinsic laryngeal muscles elevate it.
D. The piriform sinuses remain closed during the involuntary phase of swallowing.
E. The epiglottis covers the larynx to direct the bolus laterally.

14 *The following statement about phonation is false:
A. Fine adjustments of vocal cord tension and intrathoracic air pressure determine the frequency of this motion and the volume of the sound produced.
B. The complex sounds of language require resonance in the pharyngeal, oral, and nasal cavities.
C. Voice is produced by the passage of air through the glottis during abduction.
D. The articulation of language occurs as the voice is continuously modified by the muscles constituting the pharyngeal, oral, and nasal cavities.
E. Dysphonia is a consequence of the disruption of the normal mechanisms of voice production.

15 *Choose the true statement:
A. One of the main functions of the nose is to cool the inhaled air.
B. The alar cartilages are unpaired.
C. The nasal roof is formed by the inferior wall of the maxillary sinus.
D. The vascularization of the nose originates solely from the external carotid system.
E. The nasal cavities extend from the nostrils, located anteriorly, to the choanae, which are situated posteriorly.

16 *The osteomeatal complex:
A. Anterior ethmoid sinus and the superior meatus

B. Anterior ethmoid sinus and the inferior meatus
C. Posterior ethmoid sinus and the superior meatus
D. Anterior ethmoid sinus and the middle meatus
E. Posterior ethmoid sinus and the middle meatus

17 *Choose the correct statement about the Kisselbach plexus:
A. It is located at the level of the posterior nasal septum
B. Its initial branches come only from the external carotid system
C. It is a highly vascularized region
D. Its most important function is olfaction
E. It is a poorly vascularized region

18 *Choanal atresia is:
A. Always unilateral
B. An incomplete opening of the posterior wall of the nasal cavity (choana)
C. Always bilateral
D. Not requiring surgical treatment
E. A complete opening of the posterior wall of the nasal cavity (choana)

19 *Choose the false statement about maxillary sinusitis:
A. The osteomeatal complex is the rarest location for inflammatory sinus disease
B. It is one of the most frequently encountered health problems
C. It is frequently associated with nasal obstruction
D. It may present with a sensation of facial pressure
E. Pain is frequently associated

20 *The following answer is false – The oral cavity:
A. It ends at the buccopharyngeal isthmus, an arcade composed of the posterior region of the soft palate and the palatoglossal folds.
B. The buccal vestibule is a space bordered anteriorly by the lips and posteriorly by the gums, the inner surface of the cheeks, and the teeth.
C. The oral cavity is bounded anteriorly and laterally by the alveolar arches, superiorly by the hard and soft palates, and inferiorly by the tongue.
D. The tongue is the main organ of the oral cavity and plays an essential role in mastication, swallowing, articulate speech, and voice quality.
E. Taste sensation from the anterior two-thirds of the tongue is transmitted by the lingual nerve to the chorda tympani, a branch of the facial nerve.

21 *The following answer is not correct.
A. The nasopharynx is located above the level of the soft palate and communicates with the nasal cavity through the choanae.

B. Eustachian tubes are openings in the lateral walls of the nasopharynx.
C. The adenoid tissue is located on the inferior wall of the nasopharynx.
D. The oropharynx extends from the level of the hyoid bone to the soft palate.
E. The hypopharynx extends from the level of the hyoid bone toward the inferior border of the cricoid cartilage, where it narrows and continues as the esophagus.

22 *The following answer is incorrect:
A. The pharynx is located posterior to the nasal cavity, the oral cavity, and the larynx.
B. The three important muscles of the pharynx are the superior, middle, and inferior constrictor muscles, which play an important role in swallowing.
C. The hypopharynx extends from the level of the hyoid bone to the inferior border of the cricoid cartilage, where it narrows and continues as the esophagus.
D. The hypopharynx communicates anteriorly with the larynx. Immediately lateral to the larynx, there are mucosal recesses, called "piriform sinuses," which open into the esophageal lumen at the level of the upper esophageal sphincter, or cricopharyngeal muscle.
E. The nasopharynx is located above the level of the soft palate and communicates with the nasal cavity through the Eustachian tubes.

23 *The following answer is incorrect:
A. Swallowing is divided into four phases.
B. The first is the preparatory phase, during which the food bolus is minced, macerated, and mixed with saliva.
C. In the second phase, voluntary control of the tongue pushes the bolus posteriorly toward the soft palate and then into the oropharynx.
D. When the bolus traverses the oropharyngeal isthmus, the third phase begins, which is voluntarily controlled.
E. The larynx ascends, opening the piriform sinuses and the upper esophageal sphincter. The epiglottis positions itself above the larynx, acting as a gutter to direct food into the piriform sinuses.

24 *The following answer is incorrect:
A. Adenoid tissue can also become infected, producing recurrent purulent rhinorrhea and nasal obstruction.
B. If the obstruction does not respond to antibiotic treatment or is recurrent, adenoidectomy is indicated.
C. Young patients with recurrent tonsillitis also have infection of the adenoid tissue. For this reason, children often undergo tonsillectomy and adenoidectomy.
D. Because adenoid tissue can contribute to the development of recurrent middle ear infections, adenoidectomy can, in certain cases, reduce recurrent otitis
E. The presence of a peritonsillar abscess is not an indication for tonsillectomy.

25 *The rotational acceleration of the head is interpreted at the level of:
A. The cochlea
B. The utricle
C. The semicircular canals
D. The saccule
E. The organ of corti

26 The middle ear is an air-filled cavity composed of:
A. The eustachian tube
B. The tympanic membrane (eardrum)
C. The ossicular chain (malleus, incus, stapes)
D. The muscles of the stapes and the malleus
E. The semicircular canals

27 The inner ear consists of:
A. The cochlea
B. The external auditory canal
C. The semicircular canals
D. The eardrum
E. The internal auditory canal

28 Depending on the location of the lesion along the facial nerve, the following clinical manifestations may be present, such as:
A. Increased tear secretion
B. Contraction of the nicovala muscle
C. Loss of nasal and/or submandibular secretion
D. Loss of taste in the anterior region of the tongue
E. Sensory loss on the oral floor

29 Examination of the tympanic membrane will assess:
A. Its thickness
B. The presence of opacities
C. The presence of inflammation
D. The presence of abnormal deposits
E. The presence of the round window

30 In otoscopy, it must be evaluated whether:
A. There is evidence of fluid in the middle ear.
B. There is a loss of transparency of the tympanic membrane.
C. There is a loss of the light triangle.
D. There are mastoid cells.

E. There is a hydro-air level or air bubbles in the middle ear.

31 Conductive hearing loss may occur as a result of pathologies involving:
A. The external auditory canal
B. The inner ear
C. The tympanic membrane
D. The middle ear
E. The ossicular chain

32 Which of the following pathologies represent conductive hearing loss:
A. Impacted earwax
B. Otosclerosis
C. Tympanic perforation
D. Inflammation caused by severe otitis externa
E. Viral labyrinthitis

33 Which of the following pathologies can lead to sensorineural hearing loss:
A. Acoustic neuroma and other neoplasms of the inner ear or skull base
B. Tympanic perforation
C. Ossicular trauma
D. Impacted earwax
E. Viral labyrinthitis

34 In cases of middle ear infection, indications for emergency myringotomy include:
A. Middle ear infection with severe, unresponsive ear pain
B. Middle ear infection with severe, unresponsive fever or sawtooth fever
C. Middle ear infection complicated by facial paralysis
D. Otogenic meningitis
E. Otosclerosis

35 The sternocleidomastoid muscle divides the cervical region into two triangles:
A. Anterior
B. Posterior
C. External
D. Internal
E. Middle

36 The structures normally identifiable by inspection or palpation in the anterior cervical triangle are:
A. The sternocleidomastoid muscle
B. The hyoid bone

C. The larynx
D. The trachea
E. The clavicle

37 The structures normally identifiable by inspection or palpation in the anterior cervical triangle are:
A. The thyroid gland
B. The pituitary gland
C. The parotid gland
D. The submandibular gland
E. The pineal gland

38 Inflammatory conditions of the salivary glands include:
A. Suppurative adenitis
B. Acute suppurative sialadenitis
C. Parotid abscess
D. Infectious mononucleosis
E. Sjögren’s syndrome

39 Indications for tracheotomy are:
A. Bypassing an obstruction of the lower airway
B. Bypassing an obstruction of the upper airway
C. Anticipated prolonged ventilatory dependency
D. Allowing direct access for irrigation and aspiration of the airway (pulmonary toilet)
E. Reducing dead space in patients with precarious ventilatory effort or central nervous system depression

40 The differential diagnosis of a thyroglossal duct cyst can be made with:
A. Dermoid cyst
B. Pathological lymph nodes
C. Branchial cleft cysts
D. Parotid tissue
E. Ectopic thyroid tissue

41 The following are indications for tracheostomy:
A. Bypassing an obstruction of the upper airway
B. Anticipated prolonged ventilatory dependence (usually >2 days)
C. Allows direct access for irrigation and suctioning of the airway (pulmonary toilet)
D. Prevents chronic aspiration
E. Reduces the occurrence of dead space in patients with tenuous ventilatory effort or depressed central nervous system

42 The following are common causes of laryngeal stridor in adults:
A. Laryngomalacia
B. Neoplasm
C. Congenital webs of the vocal cords
D. Subglottic hemangioma
E. Vocal cord paralysis

43 The following are common causes of laryngeal stridor in children:
A. Congenital webs of the vocal cords
B. Laryngomalacia
C. Subglottic hemangioma
D. Subglottic stenosis
E. Neoplasms

44 The following statements are true:
A. The arytenoid vocal process is located medially
B. The lymphatic drainage of the larynx depends on its location
C. The laryngeal framework consists of nine cartilaginous structures
D. The paired arytenoid cartilages are pyramid-shaped with three faces and articulate inferiorly with the thyroid cartilage
E. The epiglottis is an anterior, leaf-shaped structure overlaying the superior laryngeal opening

45 The following statements are true:
A. The arytenoid cartilage is paired
B. The thyroid cartilage is unpaired
C. The cricothyroid membrane is very well represented in children
D. The larynx occupies the central compartment of the neck
E. The larynx has muscular connections with the base of the skull

46 The primary functions of the larynx:
A. Respiration
B. Protection of the airway
C. Phonation
D. Deglutition
E. Accessory passage for liquids and solids.

47 During swallowing, the following events occur:
A. The epiglottis covers the larynx to direct the bolus laterally.
B. The airway is closed, thereby preventing aspiration.

C. Before the food bolus reaches the larynx, the intrinsic muscles of the larynx lower it.
D. The larynx functions as a valve.
E. The piriform sinuses remain closed during the involuntary phase of swallowing.

48 Which of the following statements about croup are true?
A. Acute laryngotracheobronchitis usually affects children under 2 years of age.
B. The child presents with symptoms of an acute upper respiratory infection that have lasted several days.
C. In mild cases, antibiotic therapy is sufficient.
D. It affects the subglottic region but can extend the entire length of the trachea.
E. In severe cases of the disease, the child will require continuous hospitalization, with frequent treatment using epinephrine aerosols, as well as intravenous or aerosol administration of corticosteroid preparations to reduce inflammation.

49 Indicate the true statements regarding vocal cord paralysis:
A. Simple, unilateral vocal cord paralysis usually produces a voice of reduced intensity, a "whispered" voice, and sometimes tracheal aspiration.
B. The recurrent laryngeal nerve can often be traumatized or iatrogenically injured during procedures involving the carotid arteries, the thyroid gland, or during thoracic surgeries.
C. Often, investigations conducted to determine the cause of unilateral vocal cord paralysis reveal objective changes at the cervical level.
D. Congenital unilateral vocal cord paralysis may result from trauma during birth or pregnancy, caused by the unnatural stretching of the recurrent laryngeal nerve.
E. Idiopathic vocal cord paralysis is likely of viral origin and manifests similarly to other cranial nerve neuropathies, in that these may remit spontaneously without treatment.

50 The nose is an organ:
A. Olfactory
B. Respiratory
C. Locomotor
D. Digestive
E. Endocrine

51 Regarding epistaxis, it is stated that:
A. It most frequently has an anterior location.
B. It most frequently has a posterior location.
C. Posterior epistaxis is often associated with cardiovascular pathologies.
D. The most common cause is rest.
E. It always requires surgical treatment.

52 Select the correct statements regarding juvenile nasopharyngeal angiofibroma:

A. It is a benign, highly vascular tumor.
B. It is not accompanied by epistaxis.
C. It is a malignant, highly vascular tumor.
D. It is characteristic of adolescent males.
E. It is characteristic of adolescent females.

53 Acute viral rhinitis has the following characteristics:
A. It is the most common infectious pathology in humans.
B. It is always asymptomatic.
C. It has a low prevalence among children under 5 years old.
D. It is common during the warm season.
E. Frequent symptoms include nasal obstruction, rhinorrhea, and sneezing.

54 Choose the true statements about bacterial rhinitis:
A. It is commonly seen among children.
B. Among the frequent etiological agents are S. pneumoniae and H. influenzae.
C. One of the frequent etiological agents is S. aureus.
D. Antibiotic therapy cannot shorten the duration of the disease.
E. It is a genetic disease.

55 Allergic rhinitis:
A. It is the most common allergic condition.
B. It affects approximately 20% of the population.
C. It affects approximately 50% of the population.
D. It is mediated by IgE.
E. It is mediated by IgE.

56 Choose the false statements about allergic rhinitis:
A. Allergic rhinitis is most often not associated with reactive lower respiratory tract pathology
B. It mainly affects children and young adults
C. A positive family history is rarely encountered
D. Serum IgE levels are elevated
E. Serum IgE levels are decreased

57 Management of allergic rhinitis:
A. Identification of the causative allergen
B. Frequent contact with the causative allergen
C. Use of antibiotic therapy as treatment
D. Avoidance of the causative allergen
E. Administration of antihistamines

58 Rhinorrhea can be:
A. Unilateral
B. Bilateral
C. Anterior
D. Posterior
E. Only hemorrhagic

59 Choose the correct statement about hormonal rhinitis:
A. It is also called pregnancy rhinitis
B. It often occurs in association with increased levels of endogenous estrogen during pregnancy
C. Estrogens cause vascular congestion of the nose
D. It is of bacterial origin
E. It can also be seen in hypothyroidism as a result of myxedema

60 Choose the correct statements about nasal polyposis:
A. Nasal obstruction, rhinorrhea, and nasal congestion are commonly encountered
B. Most often associated with acute viral rhinitis
C. May result from mucociliary dysfunction
D. Presence of polypoid mass lesions in the nasal cavities
E. The most common location is the osteomeatal complex

61 Drug-induced rhinitis:
A. Treatment requires increasingly frequent use of decongestants
B. Has a bacterial etiology
C. Has a viral etiology
D. Most commonly caused by overuse of nasal decongestant sprays
E. Treatment requires gradual withdrawal of the medication

62 Functions of the nose include:
A. Tearing
B. Preparing the food bolus
C. Filtering inspired air
D. Humidifying inspired air
E. Warming inspired air

63 Acute sinusitis is frequently associated with:
A. Dysphonia
B. Headache and facial pain

C. Epistaxis
D. Chronic laryngitis
E. Purulent rhinorrhea

64 Choose the correct statement about nasal pyramid fractures:
A. They are the rarest fractures
B. They are the most common type of fracture
C. Nasal examination may reveal: edema, ecchymosis
D. Nasal examination may reveal: epistaxis, crepitus, or even bony deformity
E. Non-displaced nasal fractures do not require repositioning

65 The most common symptoms of chronic sinusitis are:
A. Nasal obstruction
B. Facial pressure
C. Pain
D. Hyposmia
E. Dysphagia

66 Fungal rhinosinusitis may be caused by organisms such as:
A. Aspergillus
B. S. pneumoniae
C. Phycomycetes
D. H. influenzae
E. M. catarrhalis

67 The following sinonasal tumors are benign:
A. Squamous papilloma
B. Osteomas
C. Olfactory neuroblastoma
D. Juvenile nasopharyngeal angiofibroma
E. Rhabdomyosarcoma

68 The following statements are false:
A. The oral cavity ends at the oropharyngeal isthmus, an arch composed of the posterior soft palate and palatoglossal folds
B. The oral vestibule is a space bordered anteriorly by the lips and posteriorly by the gingiva, inner cheeks, and teeth
C. The oral cavity is bounded anteriorly and laterally by the alveolar arches, superiorly by the hard and soft palate, and inferiorly by the tongue
D. The tongue is the main organ of the oral cavity and plays an essential role in mastication, swallowing, articulated speech, and voice quality

E. Taste sensation from the anterior two-thirds of the tongue is carried by the lingual nerve to the chorda tympani, a branch of the hypoglossal nerve

69 The following statements are correct:
A. The oral cavity ends at the oropharyngeal isthmus, an arch composed of the posterior soft palate and palatoglossal folds
B. The pharynx is located posterior to the nasal cavity, oral cavity, and larynx. Its three main muscles—superior, middle, and inferior constrictors—play an important role in phonation
C. The nasopharynx is located above the level of the soft palate and communicates with the nasal cavity via the choanae
D. The Eustachian tubes open into the lateral walls of the nasopharynx
E. Adenoid tissue is located on the posterior wall of the nasopharynx

70 The following statements are false:
A. The oral cavity ends at the oropharyngeal isthmus, an arch composed of the posterior soft palate and palatoglossal folds
B. The pharynx is located posterior to the nasal cavity, oral cavity, and larynx. Its three main muscles—superior, middle, and inferior constrictors—play an important role in phonation
C. The nasopharynx is located above the soft palate and communicates with the nasal cavity via the septum
D. The Eustachian tubes open into the lateral walls of the nasopharynx
E. Adenoid tissue is located on the anterior wall of the nasopharynx

71 The following statements are incorrect:
A. The nasopharynx is located above the soft palate and communicates with the nasal cavity via the Eustachian tubes
B. The Eustachian tubes open into the lateral walls of the nasopharynx
C. Adenoid tissue is located on the inferior wall of the nasopharynx
D. The oropharynx extends from the hyoid bone to the soft palate
E. The hypopharynx extends from the hyoid bone to the inferior border of the cricoid cartilage, where it narrows and continues as the trachea

72 The following statements are incorrect regarding oral cavity and pharyngeal tumors:
A. 90% of malignant tumors in this region are squamous cell carcinomas
B. Squamous cell carcinoma of the lip is associated with sun exposure and tobacco use
C. Oral cavity carcinomas typically arise on the hard palate and the mobile part of the tongue
D. These may present as exophytic tumors or infiltrative ulcers
E. Tumors of the tonsillar fossa, retromolar trigone, or base of tongue may cause dysphonia, hemoptysis, dysphagia, speech impairment, and trismus

73 The following statements are incorrect regarding oral cavity and pharyngeal tumors:
A. Lip cancers have a worse prognosis than oral cavity tumors
B. Tumors of the tonsillar fossa, retromolar trigone, or base of tongue may cause dysphonia, hemoptysis, dysphagia, odynophagia, and trismus
C. These may present as exophytic tumors or infiltrative ulcers
D. Patients with nasopharyngeal cancer may initially be diagnosed with otomastoiditis caused by mechanical obstruction of the Eustachian tube
E. Malignant tumors of the oral cavity and pharynx are treated with surgery, radiotherapy, or a combination including adjuvant chemotherapy

74 The following statements are incorrect regarding oral cavity and pharyngeal tumors:
A. Tumors of the tonsillar fossa, retromolar trigone, or base of tongue may cause hemoptysis, dysphagia, speech impairment, trismus (inability to open the mouth due to pterygoid muscle involvement), odynophagia, or otalgia
B. Patients with nasopharyngeal cancer may initially be diagnosed with suppurative otitis media caused by mechanical obstruction of the Eustachian tube
C. Any adult with unilateral serous otitis media should be evaluated for a nasopharyngeal tumor
D. Lip cancers have a worse prognosis than oral cavity tumors
E. Small, superficial lesions without nodal metastasis may be treated either surgically or with radiotherapy alone.

ANSWERS CHAP. XVII – E.N.T.

1	E
2	C
3	A
4	D
5	A
6	A
7	C
8	D
9	D
10	C
11	D
12	D
13	D
14	C
15	E
16	D
17	C
18	B
19	A
20	D
21	C
22	E
23	D
24	E
25	C
26	A, B, C, D
27	A, C, E
28	C, D, E
29	A, B, C, D
30	A, B, C, E
31	A, C, D, E
32	A, B, C, D
33	A, E
34	A, B, C, D
35	A, B
36	A, B, C, D
37	A, C, D
38	A, B, C, E
39	B, C, D, E
40	A, B, C, E
41	A, C, D, E
42	B, E
43	A, B, C
44	A, B, C, E
45	A, B, D, E
46	A, B, C
47	A, B, D
48	A, B, D, E
49	A, B, D, E
50	A, B
51	A, C
52	A, D
53	A, E
54	A, B, C
55	A, B, E
56	A, C, E
57	A, D, E
58	A, B, C, D
59	A, B, C, E
60	A, C, D, E
61	D, E
62	C, D, E
63	B, E
64	B, C, D, E
65	A, B, C, D
66	A, C
67	A, B, D
68	D, E
69	A, C
70	B, C, E
71	A, C, E
72	C, E
73	A, B, D
74	B, D

CHAP. XVIII - OBSTETRICS-GINECOLOGY

1. *Gynecologic development according to age – fetal period up to 4 years:
   A. Menstrual cycles
   B. Mature sexual characteristics
   C. All oocytes are formed and partially matured at 20 weeks of gestation
   D. Puberty
   E. Increased levels of FSH and LH with the onset of ovarian insufficiency

2. *The following statements about contraception are correct, except:
   A. Contraceptive methods aim to prevent pregnancy
   B. Each contraceptive method has certain side effects
   C. When choosing a contraceptive method, the patient's level of compliance should be considered
   D. Combined oral contraceptives are especially recommended for heavy smokers, patients with a history of DVT, estrogen-dependent malignancies, liver disease, or hypertriglyceridemia
   E. For choosing a contraceptive method, certain methods may be contraindicated due to the presence of comorbidities

3. *Premenstrual syndrome:
   A. Syndromes that occur in patients in climacteric period, preceding menstruation (in the luteal phase), and are characterized by various types of pain, emotional lability, mood changes, and symptoms related to the autonomic nervous system
   B. Syndromes that occur in patients with normal ovarian function, after menstrual bleeding (in the postmenstrual phase), and are characterized by various types of pain, emotional lability, mood changes, and symptoms related to the autonomic nervous system
   C. Syndromes that occur in patients with normal ovarian function, preceding menstruation (in the luteal phase), and are characterized by various types of pain, emotional lability, mood changes, and symptoms related to the autonomic nervous system
   D. Syndromes that occur in patients with normal ovarian function, preceding menstruation (in the luteal phase), and are characterized by abnormal uterine bleeding
   E. All of the above are correct

4. *The following are risk factors for vaginitis, except:
   A. Diabetes mellitus (DM)
   B. Unprotected sexual contact
   C. Intravaginal douching
   D. Multiple sexual partners
   E. Polycystic ovary syndrome (PCOS)

5. *Is not a risk factor for endometrial cancer:
   A. Exposure to exogenous estrogens
   B. Chronic anovulation (PCOS)
   C. Family history of fibroids
   D. Obesity
   E. Nulliparity

6. The following statements are correct about uterine fibroids:
   A. Malignant uterine tumors developed from smooth muscle of the myometrium
   B. Generally regress at menopause
   C. May be asymptomatic
   D. May cause menorrhagia, pelvic pressure or pain, constipation, urinary frequency, or infertility
   E. Transvaginal ultrasound or hysteroscopy allows localization or visualization of the tumor

7. Treatment of uterine fibroids:
   A. Asymptomatic fibroids are monitored by transvaginal ultrasound to detect abnormal growth
   B. Asymptomatic fibroids are monitored by CT/MRI to detect abnormal growth
   C. Myomectomy is indicated for resection of symptomatic fibroids in women who wish to preserve fertility
   D. Hysterectomy is indicated for resection of symptomatic fibroids in women who wish to preserve fertility
   E. Uterine artery embolization has a high probability of impairing fertility

8. Risk factors for cervical cancer include:
   A. Smoking
   B. Early age at first sexual intercourse
   C. Multiple sexual partners
   D. HPV types 16, 18, 31, or 33
   E. Diabetes mellitus (DM)

9. The following statements about benign ovarian tumors are correct:
   A. Ultrasound is used to evaluate the type of tumor (cystic or solid)
   B. Ultrasound is used to evaluate the appearance of the tumor (irregular, multiple thick septa, smooth margins)
   C. Lower abdominal pain
   D. Palpable ovarian mass on bimanual examination
   E. Postcoital or spontaneous vaginal bleeding

10. The most common types of benign ovarian tumors:
    A. Follicular cyst
    B. Luteal cyst
    C. Endometrioma
    D. Benign cystic teratoma (dermoid cyst)
    E. Ovarian fibroid

11. Which of the following is a false statement about ovarian cancer:
    A. Most often epithelial in origin (65% of cases)
    B. Most cases are diagnosed in the early stages
    C. Most cases are diagnosed only after they have grown considerably
    D. Mutations in the BRCA1 or BRCA2 genes are a risk factor
    E. The prognosis is favorable, most are diagnosed in the early stages

12. Lichen sclerosus:
    A. Chronic inflammatory disease of the anogenital region
    B. Acute inflammatory disease of the anogenital region
    C. Precursor lesion for vulvar squamous cell carcinoma
    D. Precursor lesion for cervical cancer
    E. Intense pruritus, dyspareunia

13. The following statements are correct about breast abscess:
    A. Local infection of breast tissue caused by S.aureus or streptococcus or anaerobic bacteria
    B. Most are related to menopause
    C. Most are related to breastfeeding
    D. Treatment: antibiotics, incision and drainage of fluctuating masses
    E. Complications: fistulization with recurrent abscesses

14. Breast cancer:
    A. Originates from ductal tissue in 80% of cases
    B. Originates from lobular tissue in 80% of cases
    C. Originates from ductal tissue in 20% of cases
    D. Originates from lobular tissue in 20% of cases
    E. Originates from the endometrium in 20% of cases

15. Treatment of breast carcinoma in situ:
    A. Ductal carcinoma in situ (DCIS): lumpectomy + radiation, mastectomy considered in high-risk patients
    B. Lobular carcinoma in situ (LCIS): close observation + selective estrogen receptor modulators, tamoxifen, and raloxifene, prophylactic bilateral mastectomy for patients who do not want long-term surveillance

C. Hormone receptor-positive breast cancer: tamoxifen
D. Best survival rates after combined use of mastectomy, radiotherapy, and chemotherapy
E. Treatment of metastases with systemic therapy, surgical resection, or radiotherapy for solitary lesions

16. Treatment of advanced breast cancer:
A. Chemotherapy and hormone therapy for locally advanced lesions with extension outside the breast
B. Careful observation
C. Treatment of metastases with systemic therapy surgical resection or radiotherapy for solitary lesions
D. Surgical resection and/or radiotherapy, after systemic therapy has reduced the tumor size
E. None of the answers are correct

17. Pelvic inflammatory disease:
A. Progressive infection with N.gonorrhaes or Chlamydia leading to involvement of the ovaries, uterus, fallopian tubes, or peritoneal cavity
B. Tenderness on cervical mobilization
C. Elevated leukocytes, low ESR
D. Treatment: empirical antibiotic therapy until the specific pathogen is identified
E. Complications: infertility, tubo-ovarian abscess

18. *What are the effects of folate deficiency during pregnancy:
A. Relative dehydration
B. Maternal anemia
C. Premature birth
D. Neural tube defects
E. Hypertension

19. *The following statements about prenatal visits are correct, except:
A. Good prenatal care is vital for healthy fetal development
B. Laboratory and ultrasound tests are performed at key points during pregnancy to detect infection or fetal abnormalities
C. Leopold maneuvers (external abdominal examination) may be performed in the first trimester if the fetus is breech
D. Specialized tests are performed in women at high risk for congenital anomalies
E. The initial visit includes a detailed history, physical examination, and risk assessment

20. *Represents risk factors for miscarriage, except:
A. Advanced maternal age
B. Use of nonsteroidal anti-inflammatory drugs (NSAIDs)

C. Uterine abnormalities
D. Previous miscarriages
E. Folic acid treatment for the prevention of neural tube defects

21. *The following statements are correct about preterm labor:
A. Onset of labor >37 weeks of gestation
B. Regular uterine contractions that cause changes in the cervix
C. Irregular uterine contractions that do not cause changes in the cervix
D. The risk of neonatal complications increases with increasing gestational age
E. A history of preterm labor in previous pregnancies is not a risk factor

22. *Which of the following statements about multiple pregnancy is false:
A. Any pregnancy in which more than one fetus develops at the same time
B. Dizygotic: fertilization of more than one egg by different spermatozoa, causing the appearance of different fetuses (fraternal) with separate amniotic cavities
C. Dizygotic: division of the zygote causes the appearance of identical fetuses, they may or may not share the same amniotic cavity or chorion
D. In the case of multiple pregnancies, the height of the uterine fundus is increased in relation to the gestational age, more than one cardiac focus is detected
E. The incidence is higher in patients who have undergone infertility treatments

23. Normal changes in the cardiovascular system during pregnancy:
A. Cardiac output increases by 40% due to the associated increase in VB (10-30%) and AV (12-18 bpm)
B. Myocardial oxygen (O2) demand increases
C. Systolic and diastolic blood pressure decrease slightly
D. The uterus causes the heart to rise slightly
E. Tidal volume increases by 40%, along with the increase in respiratory rate per minute due to the action of progesterone

24. The following statements about gestational age assessment are false:
A. First trimester: ultrasonography allows determination of craniocaudal length
B. First trimester: abdominal circumference, biparietal diameter, femur length, and skull circumference are used together to determine gestational age
C. In weeks 7-14, the accuracy of gestational age estimation is ±3-5 days
D. First trimester: fundal height is used to estimate gestational age
E. Measurement of gestational age in the second trimester has an accuracy of ±1-2 days

25. The following statements are correct about maternal serum alpha-protein levels:
A. This screening test is valid regardless of gestational age

B. This screening test is valid only if performed during the correct gestational window (16-18 weeks of gestation)
C. High levels are associated with an increased risk for neural tube defects, abdominal wall defects, and multiple gestations
D. Low levels are associated with an increased risk for neural tube defects, abdominal wall defects, and multiple gestations
E. Low levels are associated with an increased risk for trisomies 21 and 18

26. Induction of labor:
A. Intervention to initiate uterine contractions or accelerate the progression of labor
B. Maternal indications: preeclampsia, DM, stagnant labor, chorioamnionitis
C. Fetal: late pregnancy (>40-42 weeks), IUGR, PROM, some congenital defects
D. Main indication: need for cesarean delivery
E. Contraindication: placenta praevia

27. Cesarean section:
A. Delivery of the fetus through an incision in the uterine wall
B. Maternal indications: preeclampsia, previous uterine surgery
C. Maternal indications: dystocia, macrosomic fetus
D. Complications: hemorrhage, infection, thromboembolism
E. Complications: in the following pregnancies there is a risk of placenta praevia, placenta accreta and miscarriage

28. The following statements are correct about postpartum hemorrhage:
A. Blood loss >500ml/24 hours after a cesarean delivery is abnormal
B. Blood loss >1000ml/24 hours after a vaginal delivery is abnormal
C. It is due to uterine atony in most cases
D. Treatment: Suture existing lacerations should be performed
E. In severe or refractory cases, hysterectomy may be necessary

29. Hydatidiform mole:
A. Always malignant proliferation of trophoblastic cells
B. Benign proliferation of trophoblastic cells that can rarely become malignant
C. Types: complete or incomplete
D. Beta-HCG value is lower than the corresponding one
E. US can visualize the appearance of a “snowstorm” in the uterine cavity (anechoic, cystic formations)

30. The following statements are true about choriocarcinoma:
A. Elevated serum beta-HCG

B. Malignant gestational trophoblastic neoplasia secondary to hydatidiform mole or following abortion, ectopic pregnancy, or normal pregnancy
C. Treatment: D&C to remove the tumor
D. Treatment: Hysterectomy if the tumor is confined to the uterus; chemotherapy is routinely given
E. Treatment: The patient with early-stage disease confined to the uterus who wishes to preserve fertility may choose chemotherapy as the sole treatment method

31. Presentation at birth:
A. Pelvic presentation is the fetal presentation present in 50% of pregnancies at the time of birth
B. Cranial presentation is the fetal presentation present in >95% of pregnancies at the time of birth
C. Before 28 weeks of gestation, in 25% of cases we will encounter breech presentation, but in most cases this will transform into cranial presentation before birth
D. Pelvic presentation is the most common dystocia presentation
E. Breech presentation occurs very rarely

32. Assessment of fetal well-being is performed by:
A. Non-stress test
B. Biophysical profile
C. Contraction stress test
D. Maternal scalp puncture with fetal blood sample
E. Fetal scalp monitoring

33. Risk factors for abruptio placentae (separation of a normally inserted placenta):
A. Hypertension
B. Hypoglycemia
C. Trauma
D. Smoking
E. Multiple pregnancy

34. The following statements about PROM (premature rupture of membranes) are correct:
A. Artificial rupture of the amniotic sac to induce labor
B. Spontaneous rupture of the amniotic sac before the onset of labor
C. Amniotic fluid can be easily observed inside the vagina upon vaginal examination
D. Onset of labor at >37 weeks of gestation
E. US should be used to confirm oligoamnios and to assess the volume of residual amniotic fluid as well as fetal position

35. Ectopic pregnancy:
A. Represents implantation of the zygote outside the uterus

B. Most commonly occurs in the ampulla of the fallopian tube
C. Risk factors: pelvic inflammatory disease, previous ectopic pregnancy
D. Beta-hCG that is very elevated compared to the estimated value for gestational age should raise suspicion of ectopic pregnancy
E. More advanced or ruptured ectopic pregnancy is treated with IV hydration and surgical excision, with an attempt to preserve the fallopian tube (hemodynamically unstable patients should receive emergency surgery)

36. *Menopause:
A. The permanent cessation of menstruation due to cessation of ovarian function in late middle-aged women (approximately 51.5 years)
B. The permanent cessation of menstruation due to cessation of hypothalamic function in late middle-aged women (approximately 51.5 years)
C. It represents the first menstruation
D. Premature menopause represents the decline of ovarian function before the age of 30
E. During the period leading up to menopause (perimenopause), ovarian response to FSH and LH increases, FSH and LH levels decrease, while estrogen levels fluctuate

37. *Asherman's syndrome (intrauterine synechia):
A. It is defined as the absence of menstruation by the age of 16
B. It is caused by hypothalamic or pituitary dysfunction, anatomical abnormalities, chromosomal abnormalities with gonadal dysgenesis
C. It is defined by the presence of intrauterine adhesions and is the result of surgical procedures or intrauterine infection
D. It is frequently found in patients with regular menstruation
E. It is frequently found in patients who have not had uterine curettage or intrauterine infections

38. *Secondary amenorrhea:
A. The presence of menstruation for 6 months in a patient who has not previously had menstrual cycles
B. The absence of menstruation for 6 months or more than 3 months in a patient who has previously had menstrual cycles
C. The absence of menstruation (never occurred) by the age of 16
D. It is caused by hypothalamic or pituitary dysfunction, anatomical abnormalities, chromosomal abnormalities
E. It can be congenital

39. *The types of papillomavirus associated with cervical cancer are:
A. Strains 31 and 50
B. Types 6 and 11

C. Types 16 or 18
D. Types 9 and 21
E. Types 11 or 26

40. Follicular phase of the normal menstrual cycle:
A. Begins on the first day of menstruation
B. Begins on the 14th day of the menstrual cycle
C. FSH stimulates the growth of ovarian follicles (granulosa cells), which will secrete estradiol
D. LH stimulates the growth of ovarian follicles (granulosa cells), which will secrete estradiol
E. Estradiol induces endometrial proliferation and stimulates the synthesis of FSH and LH through positive feedback exerted on the pituitary

41. Precocious puberty:
A. The appearance of pubertal changes in girls younger than 3 years
B. The appearance of pubertal changes in girls younger than 8 years
C. The absence of menstruation after the age of 15
D. It is caused by the early activation of the hypothalamic-pituitary-ovarian axis (central precocious puberty) or the excessive autonomous secretion of sex steroid hormones (precocious pseudopuberty)
E. It is caused by the late activation of the axis hypothalamic-pituitary-ovarian (central precocious puberty)

42. Combined oral contraceptives:
A. Combination of estrogens and progestin that inhibits follicular development and ovulation
B. Changes the quality of the endometrium
C. Does not change the quality of the endometrium
D. Increases the viscosity of cervical mucus
E. Decreases the viscosity of cervical mucus

43. Contraceptives containing only progesterone:
A. Pills with only estrogen that alter the quality of the endometrium and increase the viscosity of cervical mucus, preventing fertilization and implantation
B. Pills with only progesterone that alter the quality of the endometrium and increase the viscosity of cervical mucus, preventing fertilization and implantation
C. Can be an option in patients who have a contraindication to the administration of estrogens
D. As a side effect, it has an increased risk of DVT
E. Must be taken at the same time every day to increase their effectiveness

44. Side effects of oral contraceptives combined:
    A. Possible nausea, vomiting, bloating, mood swings
    B. Low risk of DVT
    C. Increased frequency of vaginal bleeding
    D. Risk of patch detachment
    E. Increased risk of DVT

45. Risk factors for osteoporosis are:
    A. Advanced age
    B. Menopause
    C. Low weight
    D. Smoking
    E. Low alcohol consumption

46. Uterine fibroids (uterine leiomyoma):
    A. Transvaginal ultrasound or hysteroscopy allow localization or visualization of the tumor
    B. Benign uterine tumors developed from myometrial smooth muscle
    C. Generally regresses at menopause
    D. It is a malignant tumor
    E. Uterine artery embolization can be performed after pelvic MRI exploration that excludes other soft tissue pathologies

47. Endometrial cancer:
    A. Benign tumor of the endometrium that frequently occurs at young ages
    B. It is an adenocarcinoma of the endometrium
    C. It is frequently found in postmenopausal women
    D. The tumor marker CA-12 is low
    E. Endometrial biopsy shows abnormal, hyperplastic glands with vascular invasion

48. Risk factors risk in endometrial cancer:
    A. Exposure to exogenous estrogens
    B. Exposure to exogenous testosterone
    C. Chronic anovulation (SOPC)
    D. Obesity
    E. Multiparity

49. High-grade squamous intraepithelial lesion (HSIL):
    A. Moderate or severe cellular dysplasia, including carcinoma in situ
    B. Highly atypical cells, with stromal invasion
    C. Excision by LEEP or conization or laser ablation

D. Repeat cervical cytology every 6 months
E. Repeat cervical cytology every 4 months

50. Mucinous carcinoma of the breast:
A. Poorly circumscribed tumor
B. Well circumscribed tumor
C. Rapid growth
D. Slow growth
E. More common in elderly patients

51. Risk factors for ovarian cancer:
A. Family history
B. Infertility
C. Multiparity
D. Obesity
E. Smoking

52. *Gestational age:
A. Calculated from the mother's last ovulation date
B. Calculated from the mother's last menstrual period (LMP)
C. 2 weeks younger than the embryonic age
D. Calculated from the mother's due date
E. Onset approximately 28 days prior to fertilization

53. *Gestational diabetes mellitus:
A. Pre-existing diabetes mellitus
B. New onset glucose intolerance that occurs during pregnancy (after 24 weeks)
C. The patient may or may not be aware of the condition
D. Occurs most frequently in the first trimester
E. Usually symptomatic

54. *Eclampsia:
A. Pregnancy-induced hypertension with proteinuria and/or evidence of target organ damage in the circulatory system
B. Asymptomatic in mild cases
C. Progression of preeclampsia causing maternal seizures
D. Not severe for the fetus
E. Not fatal for the mother

55. *Oligoamnios:
A. Excess fluid in the gestational sac

B. May occur due to insufficient amniotic fluid intake
C. Amniotic fluid index is over 25 cm
D. Amniotic fluid index is under 5 cm
E. Fundal height may be increased in relation to gestational age

56. Gestational age:
A. Calculated based on the mother's last menstrual period (LMP)
B. LMP begins approximately 14 days before fertilization
C. 2 weeks older than the embryonic age
D. 2 weeks younger than the embryonic age
E. Calculated based on ovulation

57. Risk factors for preeclampsia:
A. Hypertension
B. Multiparity
C. Nulliparity
D. History of preeclampsia
E. Singleton pregnancy

58. Eclampsia presents with:
A. Headache
B. Visual disturbances
C. Lower abdominal pain
D. Upper abdominal pain
E. Convulsions

59. 1-hour glucose tolerance test
A. Mother is given a 50-g glucose dose
B. Serum glucose is measured one hour after glucose administration
C. Mother is given a 100-g glucose dose
D. Serum glucose is measured two hours after glucose administration
E. Blood glucose ≧135 mg/dL is considered abnormal

60. Ectopic pregnancy:
A. Implantation of the zygote outside the uterus
B. Implantation of the zygote at the fundus of the uterus
C. Most commonly occurs in the ampulla of the fallopian tube (95% of cases)
D. May be complicated by severe maternal haemorrhage
E. Unruptured ectopic pregnancy <6 weeks gestation is treated with methotrexate to induce termination of pregnancy

61. Miscarriage:
    A. Non-elective termination of pregnancy >20 weeks gestation
    B. In the first trimester is usually the result of fetal chromosomal abnormalities
    C. From the second trimester is usually determined by infection, cervico-isthmic incontinence, uterine abnormalities, hypercoagulability, coexisting maternal pathology or drug use
    D. Occurs in up to 25% of pregnancies
    E. Occurs in up to 15% of cases

62. Second trimester miscarriages are determined by:
    A. Infection
    B. Smoking
    C. Placental abnormalities
    D. Fetal chromosomal abnormalities
    E. Cervico-isthmic incontinence

63. Placenta Previa:
    A. Placental insertion near or covering the external cervical os
    B. Placenta insertion near or covering the internal cervical os
    C. Pathology frequently associated with vaginal bleeding
    D. Maternal death may occur in 1%
    E. Pathology frequently associated with gestational diabetes

64. Breech presentation incomplete (frank)
    A. Occurs in 25% of cases
    B. Thighs are flexed on the abdomen, and knees are extended
    C. Occurs in 75% of cases
    D. Thighs and knees are flexed
    E. One or both lower limbs are extended

65. Non-stress test:
    A. It is used for prenatal evaluation and during labor
    B. It is used in the late stages of pregnancy
    C. The mother should be positioned in the left lateral decubitus position
    D. The effects of fetal movements on the maternal heart rate are observed
    E. The effects of fetal movements on the fetal heart rate are observed

66. Contraindications for labor induction are:
    A. The need for cesarean delivery
    B. Scarred uterus
    C. Late pregnancy

D. Preeclampsia
E. Active genital herpes

67. Hemorrhage postpartum:
A. Blood loss of >500mL/24hrs after vaginal delivery
B. Blood loss of >1000mL/24hrs after caesarean section
C. Due to uterine atony in most cases
D. Suturing of existing lacerations should not be practiced
E. Hysterectomy may be necessary in severe cases

68. Risk factors for hydatidiform mole:
A. Personal history of molar pregnancies
B. Gestational diabetes
C. Low socioeconomic status
D. Smoking
E. Obesity

69. *Regarding the follicular phase of the menstrual cycle, the following statement is true:

A. Estradiol does not induce endometrial proliferation
B. FSH does not stimulate the growth of ovarian follicles
C. It begins on the first day of menstruation
D. LH, FSH, estrogens, progesterone have no role in regulating the menstrual cycle
E. None of the answers are correct

70. *Regarding the luteal phase of the menstrual cycle, the following statement is true:

A. The corpus luteum does not secrete estradiol and progesterone
B. Ovulation makes the transition from the follicular to the luteal phase of the menstrual cycle
C. If the oocyte is fertilized, the corpus luteum degenerates
D. The cervical mucus is reduced in quantity and has an opaque appearance
E. None of the answers are correct

71. The average age of menarche in the USA:

A. It tends to be earlier in the white race compared to the black race
B. It is 13 years
C. It is not established
D. It is 18 years
E. It tends to be earlier in the black race compared to the white race

72. Among the characteristics of gynecological development in the 11-17 year age group are:

A. LH and androgen levels decrease

B. Development of secondary sexual characteristics and growth spurts
C. Increase in LH, FSH and androgen levels reaching basal values of mature individuals
D. Characteristics of Tanner stage 1
E. Onset of menarche in girls

73. If we refer to a patient aged ≥50 years, the following statements are true:

A. It is an age at which ovarian failure physiologically begins
B. The patient only has regular menstrual cycles in perimenopause
C. The level of FSH and LH increases
D. Menopause characterized by regular menstrual cycles may set in
E. The level of LH decreases.

74. Gonadarche is characterized by:

A. Stimulation of the gonads by FSH
B. Activation of the gonads
C. Stimulation of the gonads by LH
D. Production of androgens of adrenal origin
E. Inactivation of the gonads

75. In Tanner Stage 4 regarding breast development and hair:

A. The breasts decrease slightly in size
B. Secondary nipple growth occurs
C. Pubic hair becomes increasingly rare and softer
D. Breasts continue to increase in size
E. The mammary areola does not undergo changes

76. The following statements regarding precocious puberty are true:

A. In boys, it occurs at an age younger than 8 years.
B. The appearance of pubertal changes in girls younger than 7 years of age
C. In girls, the cause is the early activation of the hypothalamic-pituitary-ovarian axis
D. It can be isosexual or heterosexual
E. FSH increases while LH decreases

77. In the course of the phenomena throughout a menstrual cycle, progesterone:

A. Increases basal temperature
B. Stimulates uterine contractility
C. Decreases the consistency of cervical mucus
D. Stimulates the development of endometrial glands

E. Does not contribute to maintaining pregnancy

78. The following statements are true regarding menopause:

A. In perimenopause, FSH and LH levels increase
B. Premature menopause occurs before the age of 40
C. Hot flashes, sweating, amenorrhea, anxiety can be signs of menopause
D. The first-line treatment for hot flashes is not weight loss
E. Hormone therapy is indicated patients at high risk of breast cancer

79. Which of the following statements about hormonal contraception are true:

A. No side effects are described
B. It aims to prevent pregnancy
C. When prescribing contraceptives, the patient's level of compliance must be considered
D. There are no contraindications, in case of comorbidities
E. It can trigger nausea, vomiting

80. In a case diagnosed with primary amenorrhea:

A. The patient has previously had 2 menstrual cycles
B. Consecutive absence of more than 3 menstrual cycles is noted
C. Absence of menstruation for more than 6 months is observed
D. The patient did not have menstruation until the age of 16, in the presence of sexual characteristics
E. Concomitant absence of menstruation and secondary sexual characteristics up to 13 years is described

81. Among the causes of secondary amenorrhea are:

A. Congenital absence of the uterus
B. Pregnancy
C. Asherman's syndrome
D. Micropolycystic ovary syndrome
E. Drugs that do not influence hormonal balance

82. Among the risk factors in dysmenorrhea are noted:

A. Absence of premenstrual syndrome
B. Menorrhagia
C. Body mass index <20kg/m2

D. Menarche > 12 years
E. Pelvic inflammatory disease

83. The following statements are true about endometriosis:

A. It represents the presence of endometrial tissue inside the uterine cavity
B. The cause is represented by retrograde menstrual flow
C. The diagnosis is established histopathologically
D. Laparoscopic ablation cannot improve fertility
E. Nulliparity and family history are not risk factors

84. Vaginal neoplasm can manifest itself through:

A. Fetid vaginal secretion
B. Postmenopausal/postcoital vaginal bleeding
C. Vaginal ulcerations
D. Irregular tumor formation, located at the uterine fundus
E. Postcoital vaginal bleeding

85. The following statements are true regarding breast cancer:

A. Diagnosis is established based on mammography
B. Nuclear magnetic resonance is a commonly used screening method
C. Tumor biopsy establishes the diagnosis with certainty
D. Mammography is a screening method
E. Testing for the presence of estrogen and progesterone receptors at the tumor level does not help determine treatment.

86. Among the physiological changes during pregnancy, the following are found:

A. Cardiac output increases by 40%
B. Total body oxygen consumption increases by 20%
C. Renal protein excretion decreases
D. Cortisol levels decrease
E. Sialorrhea

87. Regarding the assessment of gestational age (GA), the following statements are true:

A. In the first trimester, ultrasonography is used to determine the craniocaudal length, being the most accurate method of determining GA
B. In the third trimester of pregnancy, craniocaudal length is the most accurate method of estimating GA

C. GA measurement in the second trimester has an accuracy of +/- 1-2 weeks.
D. The diameters used to calculate gestational age in the second trimester are: abdominal circumference, biparietal diameter, head circumference, and femoral length
E. Maternal obesity does not affect the accuracy of ultrasound measurements

88. *The following statements about prenatal visits are false:

A. The objectives of prenatal visits are to prevent or manage pathologies that may be harmful to the mother or fetus.
B. Laboratory tests and ultrasonography are performed at key times during pregnancy to detect infections or fetal abnormalities
C. Leopold maneuvers are performed only in the first trimester of pregnancy to determine fetal presentation
D. Fetal heartbeats are assessed at each visit
E. Antenatal diagnostic tests are usually performed on women at high risk for congenital anomalies

89. Treatment of gestational diabetes mellitus includes:

A. Strict glycemic control through diet and exercise
B. Self-monitoring of blood glucose to determine the effectiveness of therapy
C. Insulin administration in patients who show favourable results to non-pharmacological therapy
D. Metformin in patients whose blood glucose level is controlled by diet and exercise
E. Ultrasound examinations to assess fetal well-being

90. Regarding preeclampsia (PE), the following statements are true:

A. PE consists of the association of increased fasting blood glucose with proteinuria
B. Risk factors include: nulliparity, history of preeclampsia, multiple pregnancy
C. The patient may be asymptomatic in mild forms
D. Signs of severity include platelets <100,000
E. A blood pressure of 140/90 mm Hg during pregnancy in a patient who was previously normotensive establishes the diagnosis does not require other measurements to establish the diagnosis

91. Among the clinical manifestations of eclampsia are:

A. Convulsive seizures
B. Lower abdominal pain that occurs one week after the convulsive seizures
C. Visual disturbances
D. Headache
E. Non-stress test is reactive

92. *Nausea and vomiting in pregnancy:

A. Usually occurs in the 3rd trimester of pregnancy
B. Diagnosis in pregnant women is difficult to establish
C. Ultrasonography and Doppler examination are routine investigations necessary to establish the diagnosis
D. Are determined by the increase in Beta-hCG
E. Symptoms usually increase as the pregnancy progresses

93. Regarding spontaneous abortions, the following statements are true:

A. First-trimester spontaneous abortions are not usually the result of trisomies
B. Second-trimester spontaneous abortions are not usually determined by cervico-isthmic incontinence or alcohol consumption drugs
C. Second-trimester miscarriages are usually caused by infection, cervico-isthmic incontinence, uterine abnormalities, hypercoagulability, coexisting maternal pathology, or drug use
D. First-trimester miscarriages are usually the result of fetal chromosomal abnormalities
E. Second-trimester miscarriages are usually caused by chromosomal abnormalities most often

94. Risk factors for spontaneous abortion include:

A. Extreme maternal age: >35 years or <15 years
B. Previous spontaneous abortions
C. Low caffeine intake
D. High folate levels
E. Previous multiple births

95. In a pregnancy that has stopped developing:

A. Vaginal bleeding is present with or without associated pain
B. The cervical os is closed
C. The uterus is empty of content
D. A viable intrauterine fetus is detected by ultrasound
E. Anti-D immunoglobulin is not recommended

96. A patient with a 15-week amenorrhoeic pregnancy presents with vaginal bleeding. Local gynecological examination reveals a closed cervical os. Ultrasound examination reveals a viable fetus:

A. A diagnosis of a pregnancy that has stopped developing
B. Bed rest is recommended
C. A diagnosis of threatened abortion is established
D. It is recommended to resume sports activity
E. It is recommended to limit activity

97. Regarding the treatment of ectopic pregnancy, the following statements are true:

A. Unruptured ectopic pregnancy < 6 weeks of gestation is treated only surgically
B. More advanced or ruptured ectopic pregnancy is treated by iv hydration without surgical intervention
C. Unruptured ectopic pregnancy < 6 weeks of gestation is treated with methotrexate
D. More advanced or ruptured ectopic pregnancy is treated by iv hydration and surgical excision
E. Unruptured ectopic pregnancy of 11 weeks of gestation is treated only with methotrexate

98. Regarding asymmetric intrauterine growth restriction, the following are true statements:

A. It is present in 50% of cases
B. It occurs in the first trimester of pregnancy
C. It is characterized by a reduction in the size of the abdomen, while maintaining the size of the skull and limbs
D. It is present in 80% of cases
E. Among the causes are smoking

99. Risk factors for spontaneous rupture of the amniotic sac (PROM) include:

A. Vaginal or cervical infection
B. Balanced maternal nutrition
C. Closed cervix without changes in length
D. PROM in previous pregnancies
E. Cervico-isthmic incontinence

100. The following therapeutic measures are applied to a patient with a 33-week gestational age who has been diagnosed with preterm labor:

A. Expectant attitude
B. Emergency termination of pregnancy by caesarean section
C. Physical activities will not be restricted
D. Glucocorticoids are administered
E. Tocolytic therapy is instituted

101. The following statements are true about ectopic pregnancy:

A. Risk factors include: pelvic inflammatory disease, sexually transmitted diseases, gynecological surgeries
B. The patient may present with abdominal pain, vaginal bleeding, amenorrhea, nausea
C. Elevated beta-hCG establishes the diagnosis of ectopic pregnancy
D. Treatment of ectopic pregnancy is exclusively surgical

E. Maternal death is a possible complication in these cases

102. Hydramnios (Hdr):

A. It represents excess amniotic fluid in the gestational sac
B. Hdr can be the reason why the height of the uterine fundus is higher in relation to the gestational age
C. It cannot be diagnosed with ultrasound
D. Amnioreduction is a diagnostic method in these cases
E. It cannot lead to complications in pregnancy

103. Regarding placenta praevia (PP), the following statements are true:

A. It is rarely associated with vaginal bleeding
B. In central PP, the placenta only partially covers the internal cervical os
C. The main symptom in cases of PP is painless bleeding
D. In central PP, natural birth is not possible
E. Caesarean section is a recommendation to terminate labor in cases with central PP

ANSWERS CHAP. XVIII - OBSTETRICS-GINECOLOGY

1	C	40	A, C, E	79	B, C, E
2	D	41	B, D	80	D, E
3	C	42	A, B, D	81	B, C, D
4	E	43	B, C, E	82	B, C, E
5	C	44	A, E	83	B, C
6	B, C, D, E	45	A, B, C, D	84	A, B, C, E
7	A, C, E	46	A, C, D, E	85	C, D
8	A, B, C, D	47	B, C, E	86	A, B, E
9	A, B, C, D	48	A, C, D	87	A, C, D
10	A, B, C, D	49	A, C, D	88	C
11	B, E	50	B, D, E	89	A, B, E
12	A, C, E	51	A, B	90	B, C, D
13	A, C, D, E	52	B	91	A, C, D
14	A, D	53	B	92	D
15	A, B, C	54	C	93	C, D
16	A, C, D	55	D	94	A, B, E
17	A, B, D, E	56	A, B, C	95	A, B
18	D	57	A, C, D	96	B, C, E
19	C	58	A, B, D, E	97	C, D
20	E	59	A, B, E	98	C, D, E
21	B	60	A, C, D, E	99	A, D, E
22	C	61	B, C, D	100	A, D, E
23	A, B, C, D	62	A, E	101	A, B, E
24	B, D, E	63	B, C, D	102	A, B
25	B, C, E	64	B, C	103	C, D, E
26	A, B, C, E	65	A, C, E		
27	A, B, D, E	66	A, B, E		
28	C, D, E	67	A, B, C, E		
29	B, C, E	68	A, C, D		
30	A, B, D, E	69	C		
31	B, C, D	70	B		
32	A, B, D, E	71	B, E		
33	A, C, D, E	72	B, C, E		
34	B, C, E	73	A, C		
35	A, B, C, E	74	A, B, C		
36	A	75	B, D		
37	C	76	C, D		
38	B	77	A, D		
39	C	78	A, B, C		

CHAP. XIX – ANESTHESIA AND INTENSIVE CARE

1. Capnography is used in clinical practice for:
   A. Continuous monitoring of end-tidal PCO2
   B. Detection of respiratory acidosis
   C. Confirmation of tracheal intubation
   D. Detection of acute airway problems in intubated and mechanically ventilated patients
   E. Assessment of respiratory function in tracheostomized patients

2. Early complications of tracheostomy include:
   A. Pneumothorax
   B. Hemorrhage due to injury of the subclavian artery or vein
   C. Tracheal stenosis
   D. Cardiac arrhythmias
   E. Subcutaneous emphysema

3. The following statements about acute ventilatory failure are true:
   A. May be caused by myasthenia gravis or Guillain-Barré syndrome
   B. High spinal cord injuries do not cause acute ventilatory failure
   C. Requires mechanical ventilation if vital capacity falls below 10 ml/kg body weight
   D. Requires mechanical ventilation if respiratory rate drops below 10 breaths per minute
   E. Tidal volume is a fine indicator of the severity of ventilatory failure

4. Indications for mechanical ventilation in acute respiratory failure are:
   A. Cranial injuries with increased intracranial pressure
   B. Obstructive sleep apnea
   C. Tachypneic, hypoxic, cooperative patient
   D. Severe bronchial asthma
   E. High-risk patient in the immediate postoperative period

5. In practical terms, respiratory failure is present when:
   A. PaO2 < 8 kPa
   B. PaCO2 < 8 kPa
   C. PaCO2 < 7 kPa
   D. PaO2 < 60 mmHg
   E. PaCO2 < 55 mmHg

6. The most common causes of type I respiratory failure are:
   A. Acute bacterial pneumonia
   B. Acute viral pneumonia
   C. Pulmonary fibrosis
   D. Cardiogenic pulmonary edema
   E. COPD

7. The most common causes of type II respiratory failure are:
   A. Guillain-Barré syndrome
   B. Pulmonary embolism
   C. Drug intoxication
   D. Acute lung injuries
   E. COPD

8. Clinical evaluation of respiratory disorders in acute respiratory failure will be done by observing the following symptoms:
   A. Asynchronous breathing (a discrepancy between the timing of abdominal and thoracic compartment movements)
   B. Paradoxical breathing (the abdominal and thoracic compartments move in opposite directions)
   C. Respiratory alternans (relative alternation of the participation of intercostal/accessory muscles and the diaphragm in each breath)
   D. Asynchronous breathing (the abdominal and thoracic compartments move in opposite directions)
   E. Paradoxical breathing (a discrepancy between the timing of abdominal and thoracic compartment movements)

9. Pulse oximeters:
   A. Can be applied to the earlobe
   B. Are applied to the fingers of the hand or foot
   C. Require calibration
   D. Provide continuous, invasive determination of venous oxygen saturation (SpO2)
   E. Measure changes in transmitted light flux through pulsatile arterial blood

10. *****The most sensitive clinical indicator of increasing respiratory difficulty is:
   A. Tachypnea
   B. Tachycardia
   C. Bradycardia
   D. Bradypnea
   E. Intercostal retraction

11. *Among the immediate complications of tracheal intubation are:
   A. Placement of the cannula in a main bronchus (usually the left)
   B. Placement of the cannula in the esophagus
   C. Migration of the cannula outside the trachea
   D. Acute sinusitis
   E. Air leakage around the cannula

12. *The late complications of tracheal intubation include the following, except:

A. Laryngeal injury
B. Cannula obstruction due to torsion or secretions
C. Sinusitis
D. Tracheomalacia
E. Tracheal stenosis and fibrosis

13. Type I respiratory failure occurs in:
A. Inadequate alveolar ventilation
B. Diseases affecting lung tissue
C. Acute lung injuries
D. Heart failure
E. COPD

14. Type II respiratory failure occurs in:
A. Pneumonia
B. COPD
C. Cardiogenic pulmonary edema
D. Pulmonary fibrosis
E. Thoracic wall deformities

15. Clinical manifestations of respiratory failure include:
A. Bradypnea
B. Intercostal retraction
C. Absence of paradoxical breathing
D. Unaffected level of consciousness
E. Tachycardia

16. Capnography can be used for:
A. Confirmation of tracheal intubation
B. Continuous monitoring of partial pressure of CO_2 in expiration
C. Detection of acute changes in cardio-respiratory function
D. Detection of acute airway problems
E. Continuous monitoring of partial pressure of CO_2 in arterial blood

17. Invasive ventilation can be performed using:
A. Face mask
B. Helmet
C. Endotracheal cannula
D. Tracheostomy
E. Nasal cannula

18. Indications for mechanical ventilation include:
A. Acute respiratory failure
B. Preoperative ventilation in high-risk patients

C. Cranial injuries: to prevent hypoxia and hypercapnia
D. Thoracic injuries with pulmonary contusions and high spinal cord injuries
E. Severe left ventricular failure with pulmonary edema

19. Immediate complications of tracheal intubation include:
A. Upper airway trauma
B. Migration of the cannula outside the trachea
C. Cannula in the esophagus
D. Air leakage around the cannula
E. Cannula in a main bronchus (usually the right)

20. Respiratory failure can be classified into:
A. Type I, in which PaO_2 is normal or increased and $PaCO_2$ is increased
B. Type II, in which $PaCO_2$ is increased and PaO_2 is decreased
C. Type I, or acute hypoxemic respiratory failure
D. Type I, or ventilatory failure
E. Type II, or ventilatory failure

21. Non-invasive ventilation can be performed using:
A. Endotracheal tube
B. Facial mask
C. Nasal mask
D. Helmet
E. Never with a nasal mask

22. The following are indications for invasive mechanical ventilation:
A. Acute respiratory failure with signs of respiratory distress persisting despite maximal therapy
B. All postoperative patients
C. Pulmonary edema responsive to non-invasive ventilation treatment
D. Coma with impairment of airway protection reflexes
E. Acute ventilatory failure in Guillain-Barré syndrome when vital capacity has decreased to 10 ml/kg or less

23. Immediate complications of orotracheal intubation include:
A. Tracheal stenosis and fibrosis
B. Cannula displacement into a main bronchus
C. Tracheomalacia
D. Misplacement of the tube into the esophagus
E. Sinusitis

24. Complications associated with mechanical ventilation include:
A. Cardiovascular: positive pressure application increases venous return
B. Barotrauma

C. Rib fractures
D. Bronchospasm
E. Volutrauma

25. The following clinical and paraclinical conditions define acute respiratory distress syndrome (ARDS):
A. Cardiogenic pulmonary edema
B. Reduced pulmonary compliance resulting in high inflation pressures
C. X-ray: new, uneven, or homogeneous bilateral infiltrates
D. Gas exchange abnormalities with PEEP > 5 cm H_2O
E. Respiratory distress

26. Common causes of acute respiratory distress syndrome (ARDS) include:
A. Pneumonia
B. Severe trauma with shock and multiple transfusions
C. Fat embolism
D. Pulmonary contusion
E. Sepsis

27. *The most common etiological factor of acute respiratory distress syndrome (ARDS) is:
A. Aspiration of gastric contents
B. Inhalation injuries
C. Sepsis
D. Severe airway burns
E. Pneumonia

28. *The following statements about acute respiratory distress syndrome (ARDS) are true, except:
A. Pulmonary hypertension is a common feature of ARDS
B. Cardiogenic pulmonary edema is a sign of ARDS
C. Intra-alveolar hemorrhagic exudate occurs
D. Pulmonary remodeling occurs in surviving patients
E. It can lead to multiple organ failure

29. Pathophysiological changes in ARDS include:
A. Shunt decreases and dead space increases
B. Pulmonary compliance decreases
C. Pulmonary compliance increases
D. Evidence of flow limitation exists
E. Both shunt and dead space increase.

30. The clinical and paraclinical picture of acute respiratory distress syndrome (ARDS) includes:
A. Tachypnea followed by increased hypoxemia and sensation of breathlessness
B. Subcrepitant rales in both lung fields

C. X-ray: diffuse bilateral pulmonary infiltrates
D. CT: "ground glass" opacity
E. CT: massive pleural effusions.

31. Treatment of acute respiratory distress syndrome (ARDS) is based on:
A. Anticoagulants
B. Limiting pulmonary edema
C. Prostacyclins and inhaled nitric oxide
D. Mechanical ventilation
E. Pronation.

32. Regarding the prognosis of ARDS, the following are true:
A. Mortality has decreased in the last two decades from 60% to 20-40%
B. Prognosis largely depends on etiology
C. Mortality increases with age and in the presence of multi-organ failure
D. Most deaths occur due to gas exchange deterioration
E. Mortality is higher in younger patients.

33. Differential diagnosis of acute respiratory distress syndrome (ARDS) includes:
A. Heart failure
B. COPD
C. Bronchial asthma
D. Pulmonary fibrosis
E. Pneumonia.

34. *The basis of ARDS treatment is:
A. Intravenous corticosteroid therapy
B. Inhaled nitric oxide
C. Patient pronation
D. Mechanical ventilation
E. Limiting pulmonary edema.

35. ARDS is classified according to the Berlin definition as:
A. Mild: PEEP $\geq$ 5 cmH_2O or PaO_2/FiO_2 ratio between 200-300 mmHg
B. Moderate: PEEP $\geq$ 5 cmH_2O or PaO_2/FiO_2 ratio between 200-300 mmHg
C. Severe: PEEP $\leq$ 5 cmH_2O and PaO_2/FiO_2 ratio between 100-200 mmHg
D. Mild: PEEP $\geq$ 5 cmH_2O and PaO_2/FiO_2 ratio between 200-300 mmHg
E. Severe: PEEP $\geq$ 5 cmH_2O and PaO_2/FiO_2 ratio < 100 mmHg.

36. From a clinical and paraclinical perspective, acute respiratory distress syndrome (ARDS) is expressed as follows:
A. The first sign is unexplained tachycardia
B. The first sign is unexplained tachypnea
C. Chest X-ray shows diffuse unilateral opacification

D. Chest X-ray shows diffuse bilateral opacification
E. Bilateral lung fields reveal wheezing.

37. Common causes of direct lung injuries that can induce ARDS include:
A. Pneumonia
B. Sepsis
C. Fat embolism
D. Amniotic fluid embolism
E. Aspiration of gastric contents.

38. ARDS is defined by:
A. Decreased pulmonary compliance
B. Presence of a cardiac cause for pulmonary edema
C. Organized unilateral pulmonary infiltrate on chest X-ray
D. New, bilateral, diffuse pulmonary infiltrates on chest X-ray
E. Presence of a non-cardiac cause for pulmonary edema.

39. The following values related to the Berlin definition of ARDS are correct:
A. Moderate ARDS: PaO_2/FiO_2 ratio < 100 mmHg
B. Mild ARDS: PaO_2/FiO_2 ratio between 200-300 mmHg
C. Severe ARDS: PaO_2/FiO_2 ratio < 100 mmHg
D. Severe ARDS: PaO_2/FiO_2 ratio > 300 mmHg
E. Mild ARDS: PaO_2/FiO_2 ratio > 100 mmHg.

40. Regarding the treatment of ARDS, the following statements are true:
A. Treatment of the underlying condition is one of the therapeutic objectives
B. Pulmonary edema should be limited through fluid restriction and diuretics if needed
C. Steroids represent the primary treatment
D. Mechanical ventilation is contraindicated in ARDS
E. Pronation is a technique to improve alveolar ventilation.

41. Frequent causes of ARDS include:
A. Amniotic fluid embolism
B. Pneumonia
C. Sepsis
D. Aspiration of gastric contents
E. Acute pancreatitis.

42. Regarding ARDS, the following statements are true:
A. Non-cardiogenic pulmonary edema is a key feature of the syndrome
B. There is increased vascular permeability
C. It is always due to heart failure
D. Pronation is one of the therapeutic measures
E. Pulmonary compliance is increased.

ANSWERS CHAP. XIX – ANESTHESIA AND INTENSIVE CARE

1 A, C, D
2 A, D, E
3 A, C
4 A, E
5 A, D
6 A, B, C, D
7 A, C, E
8 A, B, C
9 A, B, E
10 A
11 B
12 B
13 B, C
14 B, E
15 B, E
16 A, B, C, D
17 C, D
18 A, C, D, E
19 A, C, E
20 B, C, E
21 B, C, D
22 A, D, E
23 B, D
24 B, E
25 B, C, E
26 A, B, E
27 C
28 B
29 B, D, E
30 A, B, C, D
31 B, C, D, E
32 A, B, C
33 A, D
34 D
35 D, E
36 B, D
37 A, E
38 A, D, E
39 B, C
40 A, B, E
41 B, C, D
42 A, B, D

CHAP. XX - PEDIATRICS

1. Indicate which of the following statements about croup is NOT true:
   A. It represents acute tonsillar inflammation
   B. It most commonly occurs between the ages of 3 months and 5 years
   C. The cough is productive
   D. It is characterized by dyspnea and inspiratory stridor
   E. Severe cases are treated with nebulized epinephrine and corticosteroids

2. *Bronchiolitis:
   A. It is a bacterial infection of the bronchioles
   B. Most often occurs in summer
   C. Is usually seen in children >2 years old
   D. Presents with wheezing, cough, crackles, prolonged expiration
   E. Does not pose an increased risk for asthma

3. * The following statement regarding pediatric gastrointestinal disorders is false:
   A. Tracheoesophageal fistula is frequently associated with esophageal atresia
   B. In pyloric stenosis, imaging with barium transit shows widening of the pyloric canal (“string sign”)
   C. Risk factors for necrotizing enterocolitis include: prematurity, low birth weight
   D. Treatment of Hirschsprung disease consists of colostomy and resection of the affected segment
   E. Possible complications of intussusception include: intestinal ischemia, perforation during air-contrast enema reduction

4. *The false statement regarding the treatment of growth failure is:
   A. Includes a high-calorie diet
   B. Includes a low-calorie diet
   C. Includes treatment of the underlying cause
   D. Includes educating parents on proper nutrition and feeding
   E. Includes involving social support services in cases of neglect or abuse

5. *Indicate which of the following statements regarding the treatment of a child with enuresis are false:
   A. No fluid restrictions
   B. Dietary modifications
   C. Desmopressin or imipramine
   D. Enuresis alarms

E. No fluids close to bedtime

6. *In the case of a child with undescended testes (Cryptorchidism), exogenous hCG administration or orchidopexy is indicated at the age of:
   A. Before 3 years
   B. Before 6 years
   C. Before 5 years
   D. Before 1 year
   E. During adolescence

7. What are the clinical signs suggestive of congenital hypothyroidism in children?
   A. Large, open anterior fontanelle
   B. Low TSH, elevated FT4
   C. Macroglossia
   D. Umbilical hernia, constipation
   E. Hypertonia

8. Treatment of glycogen storage diseases consists of:
   A. Liver transplant
   B. Enzyme replacement therapy (Alglucosidase alfa)
   C. High-protein diet
   D. Fructose supplementation
   E. High-fat diet

9. Hemolytic disease of the newborn:
   A. Is characterized by the formation of anti-Rh antibodies
   B. Fetal Rh- cells enter the circulation of an Rh+ mother
   C. Anti-Rh antibodies cause severe hemolysis of fetal erythrocytes during the first pregnancy
   D. Anti-Rh antibodies cause severe hemolysis of fetal erythrocytes starting from the second pregnancy
   E. Hemolysis can lead to fetal death

10. *The false statement regarding Neuroblastoma is:
   A. It is a tumor originating from neural crest cells
   B. It does not occur in the adrenal glands or sympathetic ganglia
   C. It presents with: abdominal pain, abdominal mass, weight loss, general malaise, hepatomegaly
   D. Vanillylmandelic acid and homovanillic acid are measured in 24-hour urine
   E. CT scan can localize the tumor

11. The following statements regarding scarlet fever are FALSE:
    A. It presents with a diffuse erythematous papular rash with a “sandpaper” texture, strawberry tongue, and peeling of palms and soles
    B. It is caused by human herpesvirus 6 (HHV-6)
    C. Biologically: rapid streptococcal test, throat culture
    D. In severe cases, complications occur: rheumatic carditis, post-streptococcal glomerulonephritis
    E. The recommended treatment is supportive care

12. The clinical picture of rubella is characterized by:
    A. Onset with rash on the face, more prominent on the cheeks
    B. Maculopapular rash that starts on the face and spreads to the trunk
    C. In severe cases, complications occur: rheumatic carditis, post-streptococcal glomerulonephritis
    D. Associated posterior, cervical, and occipital lymphadenopathy
    E. Small spots appear on the soft palate (Forchheimer spots)

13. *The most common congenital heart defect is:
    A. Atrial septal defect
    B. Ventricular septal defect
    C. Patent ductus arteriosus
    D. Persistent truncus arteriosus
    E. Transposition of the great arteries

14. The following statements about Henoch–Schönlein purpura are true:
    A. It is the second most common vasculitis in children
    B. It is an immune complex vasculitis mediated by immunoglobulin A
    C. It is often seen in children aged 3 to 15 years
    D. It presents clinically with: purpura, abdominal pain, polyarticular arthritis/arthralgia, hematuria
    E. Urinalysis may show hematuria

15. Which of the following statements regarding Wilms tumor are true?
    A. It is a tumor that typically appears during adolescence
    B. It is a malignant tumor that originates in the kidney
    C. Clinical signs include weight loss, polyuria, palpable abdominal or flank mass, hypertension
    D. Neuroblastoma and family history of Wilms tumor are risk factors for developing this tumor
    E. Evaluation involves biological tests (creatinine, urea) and imaging (ultrasound and CT)

16. What are the main causes involved in the onset of congenital hypothyroidism?
    A. Anti-thyroperoxidase and anti-thyroglobulin antibodies
    B. Agenesis of the thyroid gland
    C. Hereditary disorders of thyroid hormone synthesis
    D. Thyroidectomy
    E. Severe iodine deficiency

17. Abnormal urethral opening in children:
    A. Is a cause of infertility in adulthood
    B. The defect can only be seen during urination
    C. It can be classified as epispadias or hypospadias depending on the location of the urethral opening on the penis
    D. Circumcision is recommended before the age of 1, followed by surgical correction
    E. It may be associated with other penile anatomical anomalies

18. The following statements regarding normal growth and development are true:
    A. Birth weight doubles by the age of 1 year
    B. Height at around 4 years is double the birth length
    C. Macrocephaly is not associated with cerebral metabolic diseases
    D. Microcephaly may be associated with fetal exposure to toxins, congenital infections, metabolic disorders, neural tube defects
    E. Weight is the most sensitive and earliest indicator in growth failure

19. The following statements are true regarding genetic pathology:
    A. Down syndrome is the most common cause of congenital intellectual disability
    B. The risk of trisomy decreases in women over 35 years old
    C. Almost all trisomies result from nondisjunction during maternal germ cell meiosis
    D. In trisomies, karyotyping can detect extra chromosomes, while genetic screening detects translocations
    E. Common genetic syndromes due to sex chromosome abnormalities include: Turner syndrome, Klinefelter syndrome, XXY, XXX

20. Fragile X syndrome is characterized by the following:
    A. It is the most common cause of familial intellectual disability in males
    B. Clinically presents with large face, prominent jaw, large ears, mild hand and foot anomalies
    C. Treatment consists of appropriate genetic counseling for the parents
    D. Prenatal DNA analysis cannot be performed in mothers with a positive family history
    E. It is a deletion syndrome

21. Fanconi anemia is characterized by the following:
    A. It is an autosomal dominant disorder
    B. It is associated with bone marrow failure
    C. There is no risk of developing leukemia
    D. Clinically: fatigue, exertional dyspnea, frequent infections, short stature, skin pigmentation, finger anomalies
    E. Biological findings: Hb, Hct, and platelets decreased; bone marrow biopsy shows hypocellularity

22. The following statements about acute otitis media are true:
    A. It is a middle ear infection, common in children under 6 years old
    B. Clinical: Ear pain, fever, fluid in the middle ear with a bulging tympanic membrane
    C. It is not an indication for antibiotic treatment
    D. Treatment: analgesics + high-dose amoxicillin-clavulanate as first-line therapy
    E. Complications: hearing loss, tympanic membrane perforation, mastoiditis, temporal abscess

23. Measles:
    A. Is caused by human herpesvirus 6 (HHV-6)
    B. Clinical: fever, cough, coryza, conjunctivitis
    C. Koplik spots are white to bluish-white lesions distributed on the scalp, chest, and extremities
    D. Routine treatment: antipyretics, antibiotics, and vitamin A
    E. Complications: pneumonia, encephalitis, acute otitis media

24. Febrile seizures:
    A. Are seizures in children between 6 and 60 months (5 years) associated with fever
    B. Occur in the context of CNS infections or lesions
    C. Require laboratory investigations, both simple and advanced
    D. Are recurrent in 65% of patients
    E. Do not require routine EEG

25. Select the correct statements regarding “whooping cough”:
    A. It is a bacterial infection caused by *Bordetella pertussis*
    B. It is a viral infection caused by parainfluenza viruses type 1 and 2
    C. The clinical course includes 3 phases: catarrhal, paroxysmal, convalescent
    D. Macrolides (erythromycin) can shorten the duration of the illness if started early
    E. The most common complications are pneumonia and apnea in infants

26. Neonatal respiratory distress syndrome:
    A. Occurs within the first 2 days after birth

B. Usually occurs after 28 days of life
C. Clinical symptoms include: cyanosis, nasal flaring, grunting, intercostal retractions, respiratory rate > 60 breaths/minute
D. Chest X-ray shows bilateral confluent opacities
E. Chest X-ray reveals bilateral atelectasis with a ground-glass appearance

27. Which statements regarding pyloric stenosis are false:
A. It is hypertrophy of the pyloric sphincter that may cause gastric outlet obstruction
B. Symptoms begin in the first few days after birth
C. Symptoms begin a few weeks after birth
D. Laboratory tests show hyperchloremic, hyperkalemic metabolic acidosis
E. Treatment is supportive and symptomatic

28. In childhood hydrocephalus, the following symptoms are commonly seen:
A. Lethargy
B. Vomiting
C. Loss of appetite
D. Headache
E. Severe pain in the right iliac fossa

29. *The following statement about Kawasaki disease is false:
A. It is most commonly seen in young children
B. It is a necrotizing inflammation of large, medium, and small vessels
C. It is the second most common vasculitis in children
D. Treatment is strictly surgical
E. Echocardiography can reveal coronary artery aneurysms

30. *The stages of pertussis (whooping cough) are:
A. Catarrhal phase: lasts 1 to 2 weeks with nonspecific symptoms—mild cough, rhinorrhea, injected conjunctivae—and may include low-grade fever.
B. Paroxysmal phase: lasts about 2 weeks with a gradual decrease in the frequency and severity of coughing.
C. Convalescent phase: after the second week of illness, paroxysmal coughing episodes begin, followed by the characteristic inspiratory “whoop,” vomiting, or syncope.
D. All of the above statements are true.
E. None of the above statements is true

31. *The following statement about Hirschsprung disease is true:
A. The treatment is medical
B. The main symptom is diarrhea
C. A barium enema shows proximal dilation (megacolon) with distal narrowing

D. Intestinal biopsy shows absence of intestinal microvilli
E. Absence of autonomic innervation causes spasms, diarrhea, and abdominal distension

32. *The following statements about Wilms tumor are false:
A. It most commonly occurs in adolescents
B. Patients may have a family history, neurofibromatosis, and other genitourinary anomalies
C. Workup includes blood urea, creatinine, and CBC to assess renal function
D. CT or ultrasound are diagnostic and may show metastases
E. Treatment involves surgical resection or nephrectomy

33. *The following statement about Pompe disease is true:
A. The treatment is liver transplant
B. Symptoms include hepatomegaly, hypoglycemia, seizures, doll-like face, thin limbs
C. The deficient enzyme is glucose-6-phosphatase
D. The deficient enzyme is lysosomal alpha-glucosidase
E. Symptoms include skeletal muscle involvement, cramps, myalgia, and fatigue

34. * The following statement about hip dysplasia is true:
A. It is more common in males
B. It represents antenatal dislocation of the femoral head from the acetabulum, disturbing normal hip development
C. The Pavlik harness is used for treatment
D. CT or MRI are necessary for diagnosis
E. Positive Galeazzi sign – knees are at equal height when hips and knees are extended

35. * The following statements about acute otitis media are true:
A. It is an acute infection of the external ear seen in children over 6 months, with increasing incidence with age
B. First-line treatment is high-dose amoxicillin-clavulanate
C. Diagnosis must be confirmed with lab work (leukocytosis with neutrophilia)
D. Complications include mastoiditis, hearing loss, temporal abscess
E. None of the above statements is true

36. Ventricular septal defect is characterized by:
A. Discontinuity of the atrial septum
B. Echocardiography demonstrates the shunt
C. In the absence of treatment, Eisenmenger syndrome develops
D. It is the most common congenital heart defect
E. ECG provides the definitive diagnosis

37. The echocardiographic features that define Tetralogy of Fallot are:
    A. Overriding aorta
    B. Common origin of both great vessels
    C. Pulmonary artery overriding an atrial septal defect
    D. Right-ventricular outflow obstruction
    E. Pulmonary veins do not drain into the left atrium

38. The following statements about laryngeal croup are true:
    A. Symptoms include barking cough, nasal congestion, inspiratory stridor, and fever
    B. Symptoms include dry cough, nasal congestion, and wheezing
    C. It is most often caused by bacterial pathogens
    D. Treatment is supportive
    E. It most commonly appears in the 10- to 14-year age group

39. Regarding bronchiolitis, the following can be stated:
    A. Symptoms include inspiratory stridor, biphasic cough, fever, and dysphonia
    B. It most often occurs in autumn
    C. A recognized complication is an increased risk of developing asthma
    D. Symptoms include dyspnea, wheezing, cough, fever, and prolonged expiration
    E. Chest X-ray establishes the definitive diagnosis

40. Neonatal jaundice can be caused by:
    A. Increased hemolysis: maternal–fetal ABO incompatibility, hereditary blood-cell abnormalities
    B. Hepatic abnormalities: Gilbert syndrome, Crigler–Najjar syndrome, biliary atresia
    C. Physiological jaundice (kernicterus) represents bilirubin deposition in the basal ganglia and hippocampus and may cause permanent damage
    D. Overproduction of bilirubin without hemolysis: hemorrhage, maternal–fetal transfusion
    E. Newborn viral hepatitis (hepatitis B) / Overproduction of bilirubin with hemolysis: hemorrhage, maternal–fetal transfusion

41. The following characteristics of intussusception are true, except:
    A. Stool has a typical currant jelly appearance
    B. Telescoping of the intestine into an adjacent segment, leading to obstruction most commonly located distal to the ileocecal valve
    C. Risk factors include: Meckel diverticulum, Henoch-Schönlein purpura (associated with ileoileal intussusception), adenovirus infection, cystic fibrosis
    D. Complications include cerebral ischemia (the diencephalon is particularly susceptible)
    E. Complications include perforation during air contrast enema reduction

42. Pyloric stenosis is characterized by the following features:

A. Treatment is surgical

B. Hypertrophy of the pyloric sphincter can cause gastric outlet obstruction

C. Barium study shows narrowing of the pyloric canal ("string sign")

D. Symptoms appear late and manifest as bilious vomiting, projectile vomiting, and a palpable abdominal mass in the hypogastrium

E. Treatment can be either surgical or medical

43. The following statements about posterior urethral valves are true:

A. They represent an abnormal fold of tissue in the distal prostatic urethra, causing bladder outlet obstruction and weak urinary stream

B. Symptoms include weak urinary stream, urinary tract infections, and abdominal distension

C. Ultrasound shows thinning of the bladder wall and unilateral hydronephrosis

D. Treatment is nephrotomy

E. Voiding cystourethrogram shows elongation and dilation of the posterior urethra during micturition

44. The following statements about congenital hypothyroidism are true:

A. It is caused by severe TSH deficiency, adrenal gland agenesis, or inherited defects of thyroid hormone synthesis

B. If untreated, it leads to abnormal mental development and growth delay (cretinism)

C. Clinical signs may include: hypotonia, large persistent fontanelle, macroglossia, umbilical hernia, dry skin, jaundice

D. Laboratory tests show elevated FT4 and low TSH

E. Treatment is levothyroxine started immediately after birth to avoid permanent developmental delays

45. The following features are present in Fanconi anemia, except:

A. Hyperkinesia

B. Lower limb abnormalities, often associated with tall stature

C. Frequent infections

D. Abnormal skin pigmentation (café-au-lait spots or hypopigmented patches)

E. Horseshoe kidney

46. Neuroblastoma is a neuroendocrine tumor with the following characteristics:

A. Symptoms include: abdominal distension and pain, weight loss, altered general condition, bone pain, diarrhea, abdominal mass, hypertension

B. CT scan can localize thyroid or lymph node tumors

C. Treatment includes surgical resection, chemotherapy, and radiotherapy

D. Prognosis is poor if it occurs after the age of 1 year and metastasizes to bone and brain

E. Risk factors include: maternal alcohol consumption, Horner syndrome, obesity

47. The following can be said about febrile seizures:
A. They occur in the absence of central nervous system infections or lesions
B. They can be simple – generalized seizures lasting less than 15 minutes
C. Antipyretics reduce the risk of febrile seizures
D. They occur in children with a family history of febrile seizures
E. EEG is necessary for a definitive diagnosis

48. The following statements about cerebral palsy (CP) are true:
A. Dyskinetic CP is caused by pyramidal tract pathology
B. Pharmacological therapy (e.g., botulinum toxin, dantrolene, baclofen, benzodiazepines), physical therapy, strengthening, and surgery may help improve symptoms and function
C. Patients with spastic CP have low tone in multiple limbs, diminished deep tendon reflexes, weakness, normal gait, and often intellectual disability
D. Patients with dyskinetic CP have choreoathetoid, dystonic, or ataxic movements that worsen with stress, and also speech difficulties (dysarthria)
E. Spastic cerebral palsy is caused by damage to the pyramidal tracts

49. Infant botulism:
A. Honey is contraindicated in children under 1 year due to the risk of infant botulism
B. Complications include anaphylactic shock and death
C. Treatment includes intravenous botulinum immunoglobulin
D. Presents with vomiting, diarrhea, poor feeding, hypertonia, tetany, absent swallowing reflex
E. Management includes airway protection and respiratory support if needed

50. In clubfoot (talipes equinovarus), the following is present:
A. Inversion of the foot
B. Plantar flexion of the ankle
C. Forefoot abduction
D. Forefoot adduction
E. Dorsiflexion of the ankle

51. Major developmental milestones during childhood include:
A. Laughs at 2 years
B. Walks well at 9 months
C. Magical thinking at 3 years
D. Can distinguish fantasy from reality at 6 years
E. Lifts head to 90 degrees at 2 months

52. Which of the following statements are true regarding trisomies:

A. Nearly all trisomies result from nondisjunction during maternal germ cell meiosis

B. The risk of giving birth to a child with trisomy increases exponentially in women over age 30

C. Down syndrome is the most common cause of congenital intellectual disability in males

D. Karyotyping can detect extra chromosomes, and genetic screening can detect translocations

E. Quadruple prenatal screening can help identify potentially affected fetuses

53. Measles:

A. The highest incidence is in the 6 months–3 years age group

B. Presents with: fever, cough, coryza, conjunctivitis, erythematous rash

C. Rash starts on the scalp, chest, and extremities

D. Koplik spots are white to bluish-white clustered lesions on the buccal mucosa, typically near the second molar

E. Treatment involves antivirals

54. Urinary tract infection:

A. Should always be considered in children under 2 years with fever and in any other child with urinary symptoms

B. Proteus mirabilis is the most common pathogen causing UTI

C. Laboratory investigations needed to confirm diagnosis include urinalysis and urine culture

D. Aminoglycosides are first-line treatment

E. Possible complications include: pyelonephritis, renal scarring, urosepsis

55. The following statements about autism spectrum disorder are false:

A. Persistent, severe impairment in social communication and interaction, as well as restricted, repetitive patterns of behavior and interests

B. Characterized by inappropriate social interaction: poor use of nonverbal behavior, failure to develop relationships, lack of social initiation, and absence of social reciprocity

C. Restrictive behavior: flexible routine, no interest in repetitive patterns, no age-appropriate pretend or imitative play

D. Treatment is exclusively pharmacological using tricyclic antidepressants

E. Behavioral, language, and social therapy involving the family and environment can help improve social interaction

ANSWERS CHAP. XX – PEDIATRICS

1 A, C
2 D
3 B
4 B
5 A
6 C
7 A, C, D
8 A, B, C
9 A, D, E
10 B
11 B, E
12 B, D, E
13 B
14 B, C, D, E
15 B, C, E
16 B, C, E
17 A, C, E
18 B, D, E
19 A, C, D, E
20 A, B, C
21 B, D, E
22 A, B, E
23 B, E
24 A, E
25 A, C, D, E
26 A, C, E
27 B, D, E
28 A, B, C, D
29 D
30 A
31 C
32 A
33 D
34 C
35 D
36 B, C, D
37 A, D
38 A, D
39 C, D
40 A, B, D, E
41 B, D
42 A, B, C
43 A, B, E
44 B, C, E
45 A, B
46 A, C, D
47 A, B, D
48 B, D, E
49 A, C, E
50 A, B, D
51 C, D
52 A, D, E
53 B, C, D
54 A, C, E
55 C, D

CHAP. XXI - EPIDEMIOLOGY

1. *The type of study that combines the results of several studies examining a disease or exposure is called:
   A. Cross-sectional study
   B. Cohort study
   C. Case-control study
   D. Meta-analysis
   E. Clinical trial

2. *Confounding factors are variables that:
   A. Affect both the experimental and control groups
   B. Are associated only with the exposure
   C. Are associated only with its outcome (disease)
   D. Are equally distributed between those who have the disease and those who do not
   E. Are introduced through publication errors

3. *The number of people who die with a certain pathology (in a specific time period), reported to the total number of patients diagnosed with the respective pathology represents:
   A. Incidence
   B. Prevalence
   C. Fatality rate
   D. Disease risk
   E. Relative risk

4. *OR (Odds ratio) is mainly determined in:
   A. Cross-sectional studies
   B. Case-control studies
   C. Retrospective cohort studies
   D. Prospective cohort studies
   E. Randomized clinical trials

5. Control groups are used in:
   A. Cross-sectional studies
   B. Cohort studies
   C. Case-control studies
   D. Randomized clinical trials
   E. Case series

6. Case-control studies:

A. Have a retrospective design
B. Allow the analysis of rare or chronic diseases, in a short period of time
C. Are burdened by several selection errors
D. Are difficult to perform, being time-consuming and financial resources
E. Are used to estimate the prevalence of the disease

7. Randomized clinical trial:
A. Represents the gold standard among studies used in medical research
B. Examines a cohort of subjects exposed to a risk factor
C. Is used to research the effectiveness of an experimental therapeutic product
D. Compares subjects receiving the investigated treatment with those who receive a placebo or already existing treatment
E. Their main disadvantage - poor control over confounding factors

8. The results of an epidemiological study cannot be extrapolated to the general population in the case of:
A. Observational errors
B. Selection errors
C. Memory errors
D. Reporting errors
E. A non-randomized allocation of subjects into study groups

9. A double-blind study avoids:
A. Investigational errors
B. Memory errors
C. Publication errors
D. Observational errors
E. Selection errors

10. The total number of people with a certain disease, in a specific area and during a specific time period represents:
A. A mortality indicator
B. The incidence of that disease
C. The prevalence of that disease
D. Fatality rate
E. A morbidity rate

11. There is an association between an exposure and a disease if:
A. $p<0.05$
B. $p>0.05$

C. RR >1
D. RR=1
E. RR ≥1

12. The probability that a screening test is positive in patients who have the disease represents:
A. Sensitivity
B. Specificity
C. Positive predictive value
D. Negative predictive value
E. An estimator used in the analysis of diagnostic tests

13. The probability that a screening test is negative in patients who do not have the disease represents:
A. Sensitivity
B. Specificity
C. Positive predictive value
D. Negative predictive value
E. An estimator used in the analysis of diagnostic tests

14. An ideal screening test has:
A. High sensitivity
B. High specificity
C. High accuracy
D. Frequent false-negative results
E. Frequent false-positive results

ANSWERS CHAP. XXI - EPIDEMIOLOGY

1	D
2	A
3	C
4	B
5	C, D
6	A, B, C
7	A, C, D
8	B, E
9	A, D
10	C, E
11	A, C
12	A, E
13	B, E
14	A, B, C

BIBLIOGRAPHY

1. Adam Feather, David Randall, Mona Waterhouse: Kumar and Clark *Clinical Medicine*. Leonard Azamfirei, Anca Dana Buzoianu, Dan Ionuț Gheonea – coordinators of the Romanian edition, 10th Edition, Hipocrate Publishing House, Bucharest, 2021.
2. Peter F. Lawrence - *General surgery and surgical specialties*. Octavian Crețu, Viorel Jinga, Viorel Scripcariu - coordinators of the Romanian edition, 6th Edition, Editura Hipocrate, Bucharest, 2021.
3. Latha Ganti, David Lebowitz, Javier Rosario, Ariel Vera: *Synopsis of medicine*. Cristina Oana Mărginean, Cătălina Poiană - coordinators of the Romanian edition, 5th Edition, Hipocrate Publishing House, Bucharest, 2021.