

Andrei Brînzeu

Personal Details

Date of birth: 11 September 1981
Place of birth: Timișoara, Romania |
Nationality: Romanian
Current address:

Professional Experience

Current position

Professor of Neurosurgery - Department VIII (Neurosciences)

Victor Babeș University of Medicine and Pharmacy

Head of Neurosurgery Department (since 2024)

At the County Emergency Clinical Hospital "Pius Brînzeu", Timișoara

Consultant Neurosurgeon (since 2020)

At the County Emergency Clinical Hospital "Pius Brînzeu", Timișoara

Previous experience**Visiting Professor****Neurosurgery - Pain Medicine - Université de Lyon (2025)****Associate Professor**

Neurosurgery - Department VIII (Neurosciences), Victor Babeş University of Medicine and Pharmacy (2020-2025)

Consultant Neurosurgeon (2019-2020 and 2025)

Employee, Hospices Civils de Lyon, 3 Quai
des Célestins, 69002 Lyon, FranceAt the "Pierre Wertheimer" Neurological and Neurosurgical Hospital, Lyon -
Neurosurgery Department A

59 Bd Pinel, 69003 Lyon, France

Specialist Neurosurgeon (2015-2019)

At the "Pierre Wertheimer" Neurological and Neurosurgical Hospital, Lyon

Neurosurgery Resident (2009-2014)

At the "Pierre Wertheimer" Neurological and Neurosurgical Hospital, Lyon

Neurosurgery Resident (2007-2009)

At the County Emergency Clinical Hospital "Pius Brînzeu", Timișoara



Education and Training

2025 Spinal Endoscopy Course, RIWO Spine - Fer à Moulin, Paris, France
(Tutor: Mehdi Affati)

2024 Habilitation to Supervise Research: "Cranial Nerve Dysfunction Syndromes"

Victor Babeş University of Medicine and Pharmacy, Timișoara

2023-2025 Certification in pain assessment and management - "Capacité Prise en Charge de la Douleur", Universities of Lyon, Saint-Étienne, Clermont-Ferrand and Grenoble

2023 Inter-university Diploma (DIU) in pain assessment and management - "DIU Prise en Charge de la Douleur", Universities of Lyon, Saint-Étienne, Clermont-Ferrand and Grenoble

2022 Lyon PITuitary - Hands-on course in diagnosis and treatment of pituitary tumors, Lyon, France

2021 Lyon PITuitary - Hands-on course in diagnosis and treatment of pituitary tumors, Lyon, France

2021 Hospital Management Training Program: National School of Public Health, Management and Improvement in Healthcare, Bucharest (MS 60) - October 2021 to February 2022

2021 Master's degree in Health Systems Management:

Victor Babeş University of Medicine and Pharmacy, Timișoara

2017 PhD in Medical Sciences, thesis: "Selection criteria for microvascular decompression under the operating microscope in trigeminal neuralgia" - Supervisor: Prof. M. Simu, Victor Babeş University of Medicine and Pharmacy, Timișoara

2016 European Abbott Fellowship in Neuromodulation

2015 Research Master's (M2) in Neurosciences, thesis: "Detection of Mismatch Negativity potentials through electrical somatosensory stimulation" - Supervisor: Prof. Louis Garcia Larrea, Université Lyon 1 "Claude Bernard"

2014 National inter-university diploma of competence in "Clinical Neurophysiology", Université de Lille 2 "Droit et Santé" and Université Lyon 1 "Claude Bernard".

2013-2016 Functional Neurosurgery Fellowship:

2016 Pain Surgery

2015 Surgery for Movement Disorders

2014 Epilepsy Surgery

2013 Skull Base Surgery

2012 Master 1 in Biomedical Research, Université Lyon 1 - Faculty of Medicine (specialization: Neuroanatomy and Psychobiology of Behavior)

2009-2013 Neurosurgery Resident with rotations at the Neurological and Neurosurgical Hospital

"Pierre Wertheimer" (Lyon), Hospices Civils de Lyon, Neurosurgery Department A

2007-2009 Neurosurgery Resident at the Timișoara County Emergency Clinical Hospital (following the 2006 national residency examination)

2000-2006 MD, Victor Babeş University of Medicine and Pharmacy, Timișoara (ranked 3rd out of 363)

1996-2000 French-Romanian bilingual high school, Mathematics-Physics

track, "Jean Louis Calderon", Timișoara
1999 St. Charles High School, Michigan, USA - graduation diploma (Soros
scholarship)

Personal Skills

Languages

Romanian: native

English: advanced level - high school graduation diploma in the USA (St. Charles, Michigan, 1999)

French: advanced level

Certification by the Embassy of France in Romania confirming successful completion of the French secondary school leaving examination (Baccalaureate, Science Section, June 2000) and exemption from the language proficiency verification test required for foreign students applying for first enrollment in a French higher education institution.

Italian: intermediate spoken level

Language	Listening	Reading	Spoken interaction	Spoken production	Writing
French	C2	C2	C2	C2	C2
English	C2	C2	C2	C2	C2
Italian	B2	B2	B1	B1	B1
German	A2	A2	A2	A2	A2

IT Skills

Microsoft Office:

Word, PowerPoint - advanced operational proficiency

Excel - expert user (database building and statistical analysis)

Outlook - advanced user

Visio - advanced user

Statistical software:

R, R Commander, SPSS, MATLAB - advanced user

Scientific databases: PubMed, Scopus

Specialized software:

BrainQuick (electroneurophysiology signal processing software) - advanced user

EasyLy (hospital database) - advanced user

Imaging software: OsiriX, Horos, Weasis

Publications

Articles

ISI-indexed publications with impact factor

2025

1. Mertens P, **Brinzeu A**. Drezotomy and Myelotomy for Cancer Pain. *Stereotact Funct Neurosurg*. 2025 Sep 29;1-10. doi: 10.1159/000548703. Epub ahead of print. PMID: 41021419.

2024

2. Sindou M, **Brinzeu A**. Technical report on intra-operative trigeminal root mapping in percutaneous lesioning for trigeminal neuralgias. *Acta Neurochir (Wien)*. 2024 Nov 1;166(1):434. doi: 10.1007/s00701-024-06323-4. PMID: 39482388; PMCID: PMC11527893. ISSN: 0001-6268 IF 1,9
3. **Brinzeu A**, Sindou M. Retrogasserian trigeminal radiofrequency-thermorhizotomy for trigeminal neuralgia. *Acta Neurochir (Wien)*. 2024 May 10;166(1):209. doi: 10.1007/s00701-024-06074-2. PMID: 38727725; PMCID: PMC11087336. ISSN: 0001-6268 IF 1,9
4. **Brinzeu A**, Berthiller J, Perretton N, Subtil F, Gervaise C, Luaute J, Mertens P; SPIDOL Study Group. SPIDOL study protocol for the assessment of intrathecal ziconotide antalgic efficacy for severe refractory neuropathic pain due to spinal cord lesions. *Trials*. 2024 Sep 7;25(1):595. doi: 10.1186/s13063-024-08387-0. PMID: 39244617; PMCID: PMC11380424. ISSN 1745-6215 IF: 2

2020

5. Sindou M, **Brinzeu A**. Topography of the pain in classical trigeminal neuralgia: insights into somatotopic organization. *Brain*. 2020;143(2):531-540. doi:10.1093/brain/awz407 IF: 13,501 ISSN 0006-8950

2019

6. **Brinzeu A**, Cuny E, Fontaine D, Mertens P, Luyet PP, Van den Abeele C, Djian MC; French SCS Study Group. Spinal cord stimulation for chronic refractory pain: Long-term effectiveness and safety data from a multicentre registry. *Eur J Pain*. 2019 May;23(5):1031- 1044. doi: 10.1002/ejp.1355. Epub 2019 Apr 1. IF: 2,991 ISSN: 1090-3801 (print) ISSN: 1532-2149 (web)
7. **Brinzeu A**, Berthiller J, Caillet JB, Staquet H, Mertens P. Ziconotide for spinal cord injury-related pain. *Eur J Pain*. 2019 Oct;23(9):1688-1700. doi: 10.1002/ejp.1445. Epub 2019 Aug 29. PMID: 31233255. IF: 2,991 ISSN:1090-3801 (print) ISSN: 1532-2149 (web)
8. E Mazzucchi **A Brinzeu** (corresp), M Sindou Arachnoiditis as an outcome factor for microvascular decompression in classical trigeminal neuralgia *Acta Neurochirurgica*: 2019 ANCH-D-19-00543 Manuscript in press, Doi: 10.1007/s00701-019-03981-7, IF: 1,929

ISSN: 0001-6268 (print), ISSN:0942-0940 (web)

2018

9. **Brinzeu A**, Dumot C, Sindou M Role of the petrous ridge and angulation of the trigeminal nerve in the pathogenesis of trigeminal neuralgia, with implications for microvascular decompression. *Acta Neurochir (Wien)*. 2018 May;160(5):971-976. doi: 10.1007/s00701-018-3468-1. IF: 1,929 ISSN: 0001-6268 (print), ISSN: 0942-0940 (web)
10. **Brinzeu A**, Drogba L, Sindou M. Reliability of MRI for predicting characteristics of neurovascular conflicts in trigeminal neuralgia: implications for surgical decision making. *J Neurosurg*. 2018 Apr 1:1-11. doi: 10.3171/2017.8.JNS171222, IF: 4,381 ISSN: 0022-3085 (print), ISSN: 1933-0693 (web)

2017

11. **Brinzeu A**, Sindou M. Functional anatomy of the accessory nerve studied through intraoperative electrophysiological mapping *J Neurosurg*. 2017 Mar;126(3):913-921. doi: 10.3171/2015.11.JNS15817. Epub 2016 Apr 8. ISSN: 0022-3085 (print) ISSN: 1933-0693 (web) IF: 4,381
12. Dumot C, **Brinzeu A** (corresponding author), Berthiller J, Sindou M. Trigeminal neuralgia due to venous neurovascular conflicts: outcome after microvascular decompression in a series of 55 consecutive patients. *Acta Neurochir (Wien)*. 2017 Feb;159(2):237-249. doi: 10.1007/s00701-016-2994-y. Epub 2016 Nov 5. IF: 1,929, ISSN: 0001-6268 (print) ISSN: 0942-0940 (web)

2016

13. M Sindou **A Brinzeu** Postoperative complications of microvascular decompression for hemifacial spasm: lessons from experience of 2040 cases *Neurosurg Review* 2016 Jan 39(1) 158:158 IF: 2,255 ISSN: 0344-5607 (print) ISSN: 1437-2320(web)

2015

14. Sindou M, Mahmoudi M, **Brinzeu A** : Hypertension of neurogenic origin: effect of microvascular decompression of the CN IX-X root entry/exit zone and ventrolateral medulla on blood pressure in a prospective series of 48 patients with hemifacial spasm associated with essential hypertension. *J Neurosurg*. 2015 Dec;123(6):1405-13. doi: 10.3171/2014.12.JNS141775. Epub 2015 Jul 31. IF: 3,441 ISSN: 0022-3085 (print) ISSN: 1933-0693 (web)
15. Sindou M, Esqueda-Liquidano M, **Brinzeu A**. Microvascular decompression for hemifacial spasm: 3-dimensional operative video. *Operative Neurosurgery*. 2015 Mar;11 Suppl 2:200; discussion 200. doi:10.1227/NEU.0000000000000573. IF: 1,670 ISSN: 2332-4252 (print) ISSN: 2332-4260 (web)

Co-author

2023

16. Baassiri W, Bani-Sadr A, Capo G, Brinzeu A, Barrey CY. Three-Dimensional Volumetric Magnetic Resonance Imaging Analysis of Syringomyelia Evolution After Posterior Fossa Decompression for Chiari Malformation Type1. *World Neurosurg.* 2023 Oct;178:e566-e577. doi: 10.1016/j.wneu.2023.07.121. Epub 2023 Aug 1. PMID: 37532020. IF 2,104

2021

17. Dauleac C, Brinzeu A, Fenniri I, Sindou M, Mertens P. Microsurgical DREZotomy for Treatment of Brachial Plexus Avulsion Pain. *World Neurosurg.* 2021 Apr;148:177. doi: 10.1016/j.wneu.2021.01.054. Epub 2021 Jan 28. PMID: 33515797. IF 2,104
18. Duraffourg M, Brinzeu A, Sindou M. How to Do It: Microsurgical DREZotomy for Pain After Brachial Plexus Injury: 2-Dimensional Operative Video. *Oper Neurosurg (Hagerstown).* 2021 Mar 15;20(4):E294-E295. doi: 10.1093/ons/opaa380. PMID: 33412582. IF 1,18
19. Ribault S, Simon E, Berthiller J, Polo G, Nunes A, Brinzeu A, Mertens P, Danaïla T, Thobois S, Laurencin C. Comparison of clinical outcomes and accuracy of electrode placement between robot-assisted and conventional deep brain stimulation of the subthalamic nucleus: a single-center study. *Acta Neurochir (Wien).* 2021 May;163(5):1327-1333. doi: 10.1007/s00701-021-04790-7. Epub 2021 Mar 2. PMID: 33649878. IF 2,607

2020

20. Wirth T, Laurencin C, Berthillier J, Brinzeu A, Polo G, Simon E, Mertens P, Broussolle E, Danaïla T, Thobois S. Feasibility of changing for a rechargeable constant current neurostimulator in Parkinson's disease. *Rev Neurol (Paris).* 2021 Mar;177(3):283-289. doi: 10.1016/j.neurol.2020.02.007. Epub 2020 Apr 15. PMID: 32305140. IF 2,

2018

21. Georgoulis G, Brinzeu A, Sindou M. Dorsal rhizotomy for children with spastic diplegia of cerebral palsy origin: usefulness of intraoperative monitoring. *J Neurosurg Pediatr.* 2018 Jul;22(1):89-101. doi: 10.3171/2018.1.PEDS17577. Epub 2018 Apr 13. IF: 2,162 ISSN: 1933-0707 (print) ISSN: 1933-0715 (web)

Letters

22. **A Brinzeu**, L Drogba, M Sindou Letters to the editor: MRI and trigeminal Neuralgia: response *J Neurosurg* 2019 Feb (130) 668. Doi:10.3171/2018.6.JNS181182 **IF: 4,318**
ISSN: 0022-3085 (print) ISSN: 1933-0693 (web)
23. Sindou M, **Brinzeu A**. Reply: To explore the pain topography of trigeminal neuralgia by compound nerve action potentials. *Brain.* 2020 Oct 1;143(10):e81. doi: 10.1093/brain/awaa237. PMID: 33103735. **IF: 13,501** ISSN 0006-8950

Indexed in bibliographic databases (BDI)

24. Esqueda-Liquidano M, Georgoulis G, Brinzeu A , Sindou M , Ariñez – Barahona E, Arellano– Cervantes R, Flores – Alvarez E Vértigo incapacitante: Descompresión microvascular del nervio vestibular dentro del meato auditivo interno. Descripción técnica. (Disabling vertigo: microvascular decompression of vestibular nerve inside internal auditory canal. Technical description) Revista Mexicana de Neurociencia DOI: 10.31190/rmn.2018.19.4 2017; 18(1):9-19, no impact factor eISSN: 2604-6180, ISSN 1665-5044
 25. M Sindou, A Brinzeu From the Laboratory to the operating room: importance of surgical anatomy at the histological scale in neurosurgery. Res Clin Med 2018 2 (2) 1-5 ISSN: 2360-1124
 26. Bassole, PR; Jung, J ; Loizon, M ;Brinzeu, A ;Barrey, C ;Andre-Obadia, N Relevance of multimodal neuromonitoring in dual lesions: About the management in Lyon Neurological Hospital of congenital scoliosis with rapid neurological deficit. African Journal of Neurological Sciences. 2021 39:2 76-82 1015-8618
 27. C Brinzeu, L Mada, A Brinzeu, A Brinzeu Invited review about the use of antibiotics in a county hospital. a romanian perspective (i) Timisoara Medical Journal 2005 55(2): 113-135. ISSN: 1583-526X (Online Edition) Index Copernicus: <https://journals.indexcopernicus.com/>; embase: <https://www.embase.com/1>
 28. D Crasnic, D Nistor, I R Siska, M I. Crasnic, R Cioaca, E Suci, A Brinzeu, V Dumitrascu, V Paunescu Adhesion Molecules Expression in Cultured Human Umbilical Endothelial Cells Timisoara Medical Journal 2003 53(1): 112-118. ISSN: 1583-526X (Online Edition) Index Copernicus: <https://journals.indexcopernicus.com/>; embase: <https://www.embase.com/1>
-

Abstracts and Proceedings

29. G. Georgoulis, A. Brinzeu, F. Turjman, M. Sindou Anévrysmes intracrâniens: clippage complémentaire au coiling : « Le danger opératoire des coils expulsés hors du sac dans l'espace cisternal » *Neurochirurgie*, Volume 57, Issues 4-6, September-December 2011, Page 279, <https://doi.org/10.1016/j.neuchi.2011.09.092> IF 0,702 ISSN: 0028-3770
30. M. Sindou, A. Brinzeu Controverses sur le rôle des conflits vasculaires dans la névralgie trigéminal classique : arguments contre versus pour *Neurochirurgie*, Volume 63, Issue 1, March 2017, Pages 45-46
<https://doi.org/10.1016/j.neuchi.2016.11.041> IF 0,702 ISSN: 0028-3770
31. L. Drogba, A. Brinzeu, M. Sindou Valeur de l'imagerie par résonance magnétique pour le diagnostic de névralgie trigéminal classique par conflit neurovasculaire (étude prospective dans une série consécutive de 100 patients) *Neurochirurgie*, Volume 63, Issue 1, March 2017, Page 44 <https://doi.org/10.1016/j.neuchi.2016.11.038> IF 0,702 ISSN: 0028-3770
32. G. Georgoulis, A. Brinzeu, P. Mertens, M. Sindou Exploration neurophysiologique intra- opératoire dans la radicotomie dorsale pour spasticité. Étude prospective sur son utilité dans une série consécutive de 8 patients diplégiques spastiques *Neurochirurgie*, Volume 63, Issue 1, March 2017, Page 45
<https://doi.org/10.1016/j.neuchi.2016.11.040> IF 0,702
ISSN: 0028-3770
33. A. Brinzeu, M. Sindou, P. Mertens Décompression vasculaire microchirurgicale pour névralgie vago-glosso-pharyngienne associé à un syndrome de dis-régulation végétative *Neurochirurgie*, Volume 57, Issues 4-6, September-December 2011, Page 279 <https://doi.org/10.1016/j.neuchi.2011.09.093> IF 0,702 ISSN: 0028-3770
34. C. Dumot, A. Brinzeu, G. Georgoulis, F. Dailler, M. Sindou Sécurité de la position assise : une étude randomisée de non-infériorité *Neurochirurgie*, Volume 60, Issue 6, December 2014, Page 322 <https://doi.org/10.1016/j.neuchi.2014.10.005> IF 0,702 ISSN: 0028-3770
35. G. Georgoulis, A. Brinzeu, G. Polo, P. Mertens, M. Sindou Traitement de la douleur neuropathique par association de méthodes neurochirurgicales. Illustration par vidéo présentation d'un cas *Neurochirurgie*, Volume 59, Issue 6, December 2013, Page 248 <https://doi.org/10.1016/j.neuchi.2013.10.074> IF 0,702 ISSN: 0028-3770
36. G. Georgoulis, A. Brinzeu, P. Mertens, M. Sindou Radicotomie dorsale pour le traitement de la spasticité des enfants diplégiques. Abord étagé interlaminaire et monitoring clinique et EMG pour cartographie topographique et testing électrophysiologique *Neurochirurgie*, Volume 59, Issue 6, December 2013, Pages 228-229

<https://doi.org/10.1016/j.neuchi.2013.10.015> IF 0,702 ISSN: 0028-3770

37. C. Dumot, A. Brinzeu, É. Simon, M. Sindou Place des compressions veineuses dans les névralgies trigéminales primaires traitées par décompression vasculaire pure : à propos d'une série consécutive de 115 cas de conflits veineux *Neurochirurgie*, Volume 59, Issue 6, December 2013, Page 234 <https://doi.org/10.1016/j.neuchi.2013.10.032> IF 0,702 ISSN: 0028-3770
38. M. Sindou, C. Batailler, A. Brinzeu, E. Simon, P. Mertens Le rôle de l'« effet de chevalet » de l'arête pétreuse sur la racine trigéminal dans la genèse des névralgies trigéminales primaires. Vidéo d'un cas illustratif (3'30) *Neurochirurgie*, Volume 58, Issue 6, December 2012, Page 421 <https://doi.org/10.1016/j.neuchi.2012.10.039> IF 0,702 ISSN: 0028-3770
39. Brinzeu A., M. Sindou, E. Simon, P. Mertens Étude de l'anatomie fonctionnelle (somatotopie) des radicelles du nerf accessoire (XI) par stimulation directe et monitoring EMG, en peropératoire *Neurochirurgie*, Volume 57, Issues 4- 6, September-December 2011, Page 257 <https://doi.org/10.1016/j.neuchi.2011.09.024> IF 0,702 ISSN: 0028-3770
40. Pardey Bracho G.F., Brinzeu A, Lukaszewicz A.-C., Mertens P., Lehot J.J. Friedreich's ataxia (FA), comorbidities and anaesthetic management. *European Journal of Anaesthesiology* 2017 34 eSupplement 55 06AP01-6 p150 ISSN: 0256-0215 IF: 3,634 (abstract book of the 2017 Geneva ESA congress)
41. Brinzeu A., Dumot C., Georgoulis G., Dailler F., Sindou M., Mertens P Safety of the sitting position. A pseudorandomised non-inferiority methodology study *European Journal of Anaesthesiology* 2017 34 eSupplement 55 06AP01-6 p165 ISSN: 0256-0215 IF: 3,634 (abstract book of the 2017 Geneva ESA congress)
42. A Brinzeu Surgery for pain in cancer patients *Romanian Neurosurgery Journal* 2018 32 Supplement Pag 17 ISSN 1220-8841 Abstract book of the 44th Romanian congress of Neurosurgery
43. G Georgulis, A Brinzeu, M Sindou, Dorsal Rhizotomy for children with spastic diplegia - quadriplegia of cerebral palsy origin: intraoperative neuromonitoring. *Romanian Neurosurgery Journal* 2018 32 Supplement Pag 21 ISSN 1220-8841 Abstract book of the 44th Romanian congress of Neurosurgery
44. A Brinzeu, M Sindou Reliability of MRI for predicting characteristics of the neurovascular conflicts in trigeminal neuralgia: implication in surgical decision making for microvascular decompression. *Romanian Neurosurgery Journal* 2018 32 Supplement Pag 21 ISSN 1220- 8841 Abstract book of the 44th Romanian congress of Neurosurgery
45. A Brinzeu, M Guenot Classical temporal lobectomy 3D video presentation. *Romanian Neurosurgery Journal* 2018 32 Supplement Pag 30 ISSN 1220- 8841 Abstract book of the 44th Romanian congress of Neurosurgery
46. T Idricianu, C Dumot, E Jouanneau, J Guyotat, M Sindou, A Brinzeu Safety of the sitting position a natural randomisation study on 96

- patients. Romanian Neurosurgery Journal 2018 32 Supplement Pag 39
ISSN 1220- 8841 Abstract book of the 44th Romanian congress of
Neurosurgery
47. D Mitrea, A Brinzeu Review of awake craniotomy for brain tumor
resection: interest of neurological testing reference to a
clinical case. Romanian Neurosurgery Journal 2018 32 Supplement
Pag 77 ISSN 1220-8841 Abstract book of the 44th Romanian congress
of Neurosurgery
 48. A Brinzeu, M Sindou Clivability of convexity meningiomas Romanian
Neurosurgery Journal 2018 32 Supplement Pag 90 ISSN 1220-8841
Abstract book of the 44th Romanian congress of Neurosurgery
 49. A Brinzeu, M Sindou Outcome after surgery for classical trigeminal neuralgia –
comparative study and meta-analysis Abstract book of the 43rd Congress of the
Romanian Society of Neurosurgery. Page 61. no ISSN/ISBN
 50. A Brinzeu, M Sindou Reliability of various MRI techniques for the detection of
NVC in patients with classical TN Abstract book of the 43rd Congress of the
Romanian Society of Neurosurgery. Page 132. no ISSN/ISBN
 51. A Brinzeu, C Dumot, M Sindou Outcome after Microvascular Decompression for
Trigeminal Neuralgia Due to Venous Neurovascular Conflicts: In a Series of
Consecutive Patients in Stereotact Funct Neurosurg 2016;94(suppl 1):1–132 DOI:
10.1159/000448961 #8601 p37 Abstract book of the 22nd Congress of the
European Society of Stereotactic and Functional Neurosurgery
 52. A Brinzeu, P Mertens, H Staquet Intrathecal Ziconotide for the Treatment of Severe
Chronic Refractory Neuropathic Pain Due to Spinal Cord Lesions in Stereotact
Funct Neurosurg 2016;94(suppl 1):1–132 DOI: 10.1159/000448961 #8601 p37
Abstract book of the 22nd Congress of the European Society of Stereotactic and
Functional Neurosurgery
-

Books and Chapters

International Book

53. Marc Sindou, Andrei Brinzeu; Trigeminal Neuralgias: A Neurosurgical Illustrated Guide Springer Nature Zurich, Geneva 2023 158 pg Hardcover ISBN: 978-3-031-25111-5 eBook ISBN 978-3-031-25113-9 <https://doi.org/10.1007/978-3-031-25113-9> in English

International Book Chapters

54. Marc Sindou, George Georgoulis, Andrei Brinzeu, Chapter 38 - Neurosurgical lesioning procedures in spinal cord and dorsal root entry zone for pain, Editor(s): Vedran Deletis, Jay L. Shils, Francesco Sala, Kathleen Seidel, Neurophysiology in Neurosurgery (Second Edition), Academic Press, 2020, Pages 535-549, ISBN 9780128150009, <https://doi.org/10.1016/B978-0-12-815000-9.00038-1>. (<https://www.sciencedirect.com/science/article/pii/B9780128150009000381>)
55. Marc Sindou, Andrei Brinzeu, George Georgoulis, Chapter 35 - Neurosurgical lesioning- procedures for spasticity and focal dystonia, Editor(s): Vedran Deletis, Jay L. Shils, Francesco Sala, Kathleen Seidel, Neurophysiology in Neurosurgery (Second Edition), Academic Press, 2020, Pages 499-513, ISBN 9780128150009, <https://doi.org/10.1016/B978-0-12-815000-9.00035-6>. (<https://www.sciencedirect.com/science/article/pii/B9780128150009000356>)
56. Marc Sindou, Andrei Brinzeu, Kim Burchiel: Dorsal Root Entry zone lesions for pain pag: 1459-1467 in « Youmans Neurological surgery », Winn H.R. (ed), Elsevier-Saunders, Philadelphia, Seventh edition, 2016, eBook ISBN: 9780323341493, eBook ISBN: 9780323341509, Hardcover ISBN: 9780323287821 4320 pages – in English
57. Marc Sindou, Andrei Brinzeu, Kim Burchiel: Dorsal Root Entry zone lesions for pain pag: 1459-1467 in « Youmans Neurological surgery », Winn H.R. (ed), Elsevier-Saunders, Philadelphia, Eight edition, 2022, eBook ISBN: 9780323341493, eBook ISBN: 9780323341509, Hardcover ISBN: 9780323287821 4320 pages – in English
58. G Georgulis, A Brinzeu, M Sindou: Dorsal Rhizotomy of the lumbo-sacral nerve roots for the treatment of spastic diplegia in cerebral palsy patients in Fessler and Sekhar (eds) in « Atlas of neurosurgical techniques : Spine and Peripheral nerves» 2nd edition, Thieme, New York; 2016 Print ISBN: 9781626230545, E-Book ISBN: 9781626230552 DOI: 10.1055/b-0036-136722
59. Sindou, M; Georgoulis, G ; Brinzeu, A Dorsal Rhizotomy of the Lumbosacral Nerve Roots for the Treatment of Spastic Diplegia in Cerebral Palsy Patients chapter in Fessler, RG; Sekhar, LN Atlas of Neurosurgical Techniques - Spine and Peripheral Nerves Thieme New York 2016 ISBN-13: 9781626230545 996 pg; pages 690-706
60. Marc Sindou, Andrei Brinzeu: Surgical Anatomy of the Triangular Plexus and Trigeminal Root. Implications for RF-Thermo-Rhizotomy in Raymond F. Sekula Jr., Marc Sindou, Shi- Ting Li Jun Zhong Eds Microvascular Decompression Surgery; Advances and Expansion of Strategy and Techniques Springer Heidelberg - New York - London 2024. e- book ISBN 978-981-96-0766-2
61. Marc Sindou, Andrei Brinzeu: Atypical Trigeminal Neuralgias: Neurosurgical

Management in Raymond F. Sekula Jr., Marc Sindou, Shi- Ting Li Jun Zhong Eds Microvascular Decompression Surgery; Advances and Expansion of Strategy and Techniques Springer Heidelberg - New York - London 2024. e- book ISBN 978-981-96-0766-1

62. A Birnzeu, M Sindou: MVD for arterial hypertension: a review 123-135 in Raymond F. Sekula Jr. Shi- Ting Li Jun Zhong « Microvascular decompressive surgery » Springer Heidelberg - New York - London 2016. e- book ISBN 978-94-017-7366-9, Hardcover ISBN 978-94-017-7365-2, Softcover ISBN 978-94-024-1336-6
 63. Marc Sindou, A Brinzeu, J Maarawi "Neurochirurgie de la douleur" 17-700- B-10, 2015, 25 de pages, Doi : 10.1016/S0246-0378(15)62885-8 in Encyclopédie médico-chirurgicale : Neurologie (Autor Colectiv) 7 Volume 3140 pages. ISSN 0246-0378, ISBN 9782842995102 Elseveir- Masson SAS 2015 – in French
 64. Marc Sindou, A Brinzeu : "Nevralgie Trigeminale et Neurochirurgie" 17-023- A-85, 2018, 15 pages Doi : 10.1016/S0246-0378(18)86582-4 in Encyclopédie médico-chirurgicale : Neurologie (Autor Colectiv) 7 Volume 3140 pages. ISSN 0246-0378, ISBN 9782842995102 Elseveir- Masson SAS 2018 – in French
 65. M.Sindou, A.Brinzeu, Nevralgia del trigemino e neurochirurgia in [https://doi.org/10.1016/S1634-7072\(18\)41586-3](https://doi.org/10.1016/S1634-7072(18)41586-3) EMC Neurologia ISSN:1634-7072 in Italian.
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Theses and Dissertations

66. Andrei Brînzeu: Cranial nerve dysfunction syndromes. Habilitation thesis (habilitation to supervise research), publicly defended on 24 October 2024, Doctoral School of Medicine, Victor Babeş University of Medicine and Pharmacy, Timișoara.
67. Andrei Brînzeu: Selection criteria for microvascular decompression in patients with trigeminal neuralgia. Supervisor: Prof. M. Simu. Consultant: Prof. M. Sindou. 17 October 2017, Timișoara. Doctoral School of Medicine, Victor Babeş University of Medicine and Pharmacy, Timișoara. PhD thesis in Medical Sciences.
68. Andrei Brînzeu: Mismatch Negativity cognitive potential evoked through somatosensory electrical stimulation. Supervisor: Luis Garcia-Larrea. 10 June 2015, Lyon. Doctoral school: Neurosciences and Cognition, University of Lyon, France. Research Master's (M2) thesis in Neuroscience.

Awards

2018 Award for the best publication in functional neurosurgery for the year 2017, granted by Acta Neurochirurgica at the EANS (European Association of Neurosurgical Societies) congress in Brussels.

Scholarships

2004 Scholarship awarded by the Edinger Foundation (Prof. Karl Plate), Institute of Neuropathology Edinger, Johann Wolfgang Goethe University, Frankfurt am Main, Germany, for a research placement (planned 14 months) under the supervision of Dr. Stephan Moma, in the field of neural stem cells

2003 Scholarship awarded by UMFT for a 1-month introductory research internship at the Edinger Institute of Neuropathology, Johann Wolfgang Goethe University, Frankfurt am Main, Germany.

1998 Scholarship won through national competition (32 scholarships out of 738 candidates), awarded by the Soros Open Society Foundation for one year of study at a high school in the USA (St. Charles, Michigan).

Laboratory Research Internships

6 months (January-June 2015) Research internship within the doctoral school "Centre de Recherche en Neurosciences de Lyon" (CRNL), INSERM unit of Prof. Louis Garcia Larrea, NEUROPAIN - U786 (central integration of pain), for the Research Master 2 in Neurosciences at Université Lyon 1. 2013-2014 Participation as co-investigator in the ESTIMET study regarding the benefit of spinal cord stimulation with the SPECIFY 5-6-5 electrode.

2012-2013 Participation as co-investigator in the CEMKA-Eval study: post-reimbursement registry of Medtronic spinal cord stimulators in France (see Eur J Pain 2018 article).

2012-2013 Participation as co-investigator in the PRIME study - an observational study on the use of intrathecal ziconotide.

2009-2013 Research internship as part of the Master 1 in Biomedical Research at Université Lyon 1, conducted in the operating theatre of the Lyon Neurological Hospital under the supervision of Prof. Sindou, focusing on intraoperative stimulation of the accessory nerve (CN XI) (see A. Brinzeu, M. Sindou, JNS 2017).

2 months (August-September 2003) at the Edinger Institute, JW Goethe University, Frankfurt am Main, Germany, under the supervision of Dr. Stephan Moma and Prof. Karl H. Plate, in the field of neural stem cells.

6 months (September 2002 - March 2003) in the Histology Department of the Victor Babeş University of Medicine and Pharmacy, Timișoara, with Prof. Marius Raica

1 month (August 2002) at the Edinger Institute of JW Goethe University, Frankfurt am Main, Germany, under the supervision of Prof. Karl H. Plate, to learn basic techniques in molecular and cellular biology and neuropathological diagnosis.

3 months (February-April 2002) in the Immunology laboratory of the Department of Physiology, University of Medicine and Pharmacy Timișoara, under the supervision of Prof. Virgil Paunescu, in the field of stem cells (see D. Crasnic, Timisoara Medical Journal 2003).

Research Projects (Grants)

Key contribution to project development, grant acquisition and initiation of the SPIDOL study within the French Hospital Clinical Research Program (PHRC), a project funded by the French state with

EUR 750,000 for a randomized multicenter study in neuropathic pain recruiting patients since September 2019. Dr. Brinzeu participates as co-director of the project.

Reviewer**Reviewer for**

World Neurosurgery - 49 reviews ISSN 1878-8750; IF: 1.924

Neuroradiology ISSN - 7 reviews ISSN 0028-3940; IF 2.346

European Journal of Pain - 21 Reviews IF 3,5

Conference Presentations

Invited Presentations

A. Brinzeu - Results from the 2-year follow-up registry of Medtronic spinal cord stimulator implantation. Forum Medflow, Paris, March 14, 2019

A Brinzeu Motor cortex stimulation. at the 23rd Congress of the European Society of Stereotactic and Functional Neurosurgery in Glasgow, Scotland 26-29 September 2018

A. Brinzeu "Ziconotide for spinal cord injury-related pain" - 6th International Symposium Invasive Procedures in Motion 2018, March 2-3, Nottwil, Lucerne, Switzerland

A. Brinzeu - Intraoperative Neuromonitoring, ASNER National Conference, Căciulata, 2017

A Brinzeu From The Lab to the OR and all the way back. At the Healthcare, Education and Research Talks in Timisoara, Romania 2017

A Brinzeu: Essential Hypertension and neurovascular compression- is there a relation? 6th Annual EANS Young Neurosurgeons' Meeting: Posterior Fossa and the Craniocervical Junction 7-10 April 2016 Royal college of Surgeons of England, London, UK

A Brinzeu: "Tricks of the trade in trigeminal neuralgia." 6th Annual EANS Young Neurosurgeons' Meeting: Posterior Fossa and the Craniocervical Junction 7-10 April 2016 Royal college of Surgeons of England, London, UK

A Brinzeu Use of somatosensory evoked potentials in selecting patients for spinal neuromodulation at the 12th World Congress of the International Neuromodulation Society in Montreal, Quebec, Canada June 6-11, 2015

Andrei Brinzeu - Intraoperative neurophysiology for intramedullary lesions. Presentation at the 13th National Congress of the German Society of Anaesthesiology: workshop on intraoperative monitoring. Berlin, October 2013

Oral Presentations

2018

A Brinzeu Surgery for pain in cancer patients. at the 44th Congress of the Romanian Society of Neurosurgery September 2018 Timisoara, Romania

A Brinzeu, M Sindou Reliability of MRI for predicting characteristics of the neurovascular conflicts in trigeminal neuralgia: implication in surgical decision making for microvascular decompression. at the 44th Congress of the Romanian Society of Neurosurgery September 2018 Timisoara, Romania

A Brinzeu, M Guenot Classical temporal lobectomy 3D video presentation. at the 44th Congress of the Romanian Society of Neurosurgery September 2018 Timisoara, Romania

A Brinzeu, M Sindou Clivability of convexity meningiomas at the 44th Congress of the Romanian Society of Neurosurgery September 2018 Timisoara, Romania

A. Brinzeu, T. Brousolle, P. Mertens. Longevity of implanted pulse generators in deep brain stimulation: a comparative study. Presented at the French Society of Neurosurgery Congress, Grenoble, 2018

2017

Andrei Brinzeu, Marc Sindou: Outcome after surgery for classical trigeminal neuralgia – comparative study and meta- analysis. 3rd Congress of the Southeast Europe Neurosurgical Society September 14-16, 2017, Cluj-Napoca, Romania.

Andrei Brinzeu, Marc Sindou: Reliability of various MRI techniques for the detection of NVC in patients with classical TN. 3rd Congress of the Southeast Europe Neurosurgical Society September 14-16, 2017, Cluj-Napoca, Romania.

Posters at international conferences

2016

A Brinzeu, C Dumot, M Sindou: "Outcome after microvascular decompression for Trigeminal Neuralgia due to venous neurovascular conflicts in a series of consecutive

patients." XXIIInd Congress of the European Society for Stereotactic and Functional Neurosurgery. 28 September – 1st of October 2016 Madrid, Spain.

A Brinzeu, P Mertens, H Staquet: "Intrathecal ziconotide for the treatment of severe chronic refractory neuropathic pain due to spinal cord lesions" XXIIInd Congress of the European Society for Stereotactic and Functional Neurosurgery. 28 September – 1st of October 2016 Madrid, Spain.

2015

A Brinzeu, M. Sindou, P. Mertens Décompression vasculaire microchirurgicale pour névralgie vago-glosso-pharyngienne associated with a vegetative dysregulation syndrome. Neurochirurgie, presented at the French Society of Neurosurgery Congress, Toulouse, 2015

2014

Andrei Brinzeu, Emile Simon, Marc Sindou, Patrick Mertens. Somatotopic organization of the accessory nerve (in French): "Organisation somathotopique du nerf accessoire". Functional anatomy study using intraoperative EMG. 96th Congress of the Association des Morphologistes, Amiens, March 2014.

2011

A. Brinzeu, E. Simon, P. Mertens, M. Sindou. Trigeminal neuralgias due to multiple neurovascular conflicts. Operative decompression technique (in French): "Névralgies du trijumeau par conflits vasculo-nerveux multiples. Technique opératoire de décompression". Presented at the 30th Congress of the French National Society of Neurosurgery, Dijon, France.

2007

A. Brinzeu, E. Oprea, L. Mada, A. Vacarescu, A.M. Patrascu, C. Macarie, A. Botke, T. Singh, A.T. Brinzeu, C. Brinzeu. Standardized mortality rate in intensive care. Presented at the 25th Congress of the Romanian Society of Anaesthesia and Intensive Care, Sinaia, Romania.

2006

A. Brinzeu, E. Oprea, L. Mada, A. Vacarescu, A.M. Patrascu, C. Macarie, A. Botke, T. Singh, A.T. Brinzeu, C. Brinzeu. Predictors of mortality in intensive care. Presented at the

24th Congress of the Romanian Society of Anaesthesia and Intensive Care, Eforie Nord, Romania.

2005

A. Brinzeu, A. Botke, A. Vacarescu, Emilia Oprea, T. Singh, V. Ciocotisan. Cost efficiency of antibiotherapy in a Romanian ICU, presented at the 9th International Congress for Medical Students and Young Doctors, Timișoara, Romania.

2003

A. Brinzeu, M. Raica. Pancreatic D cells, presented at the 6th International Congress for Medical Students and Young Doctors, Timișoara, Romania.

Posters

2017

Brinzeu A., Dumot C., Georgoulis G., Dailler F., Sindou M., Mertens P Safety of the sitting position. A pseudorandomised non-inferiority methodology study at the 2017 European Society of Anaesthesiology congress in Geneva, Switzerland

Andrei Brinzeu, Marc Sindou: "Clinical and neurophysiological evidence that spinal cord stimulation works through dorsal column fibers. What about dorsal root ganglion stimulation." 17th Quadriennial meeting of the World Society for Stereotactic and Functional Neurosurgery 26-29 June 2017 Berlin, Germany

Andrei Brinzeu, Landry Drogba Marc Sindou: Diagnostic value of MRI for the identification of neurovascular conflicts in patients with classical trigeminal neuralgia. 17th Quadriennial meeting of the World Society for Stereotactic and Functional Neurosurgery 26-29 June 2017 Berlin, Germany

2016

Andrei Brinzeu, C. Dumot, J. Berthillier, M. Sindou. Trigeminal neuralgia due to venous neurovascular conflicts: outcome after microvascular decompression in a series of 86 consecutive patients. EANS Congress (European Association of Neurosurgical Societies), Athens, 2016.

2014

Andrei Brinzeu, C. Dumot, P. Mertens, E. Simon. Failure of robotic stereotactic biopsy due to tumor hardness in a posterior fossa lesion - 2 illustrative cases. Poster at the EANS Congress, Prague, 2014

Andrei Brinzeu, E Simon, P Mertens, M Sindou. Anatomy of the XIth nerve tested through intraoperative neurophysiology. At the 2014 Annual Meeting of the Congress of Neurological Surgeon 18-22 October, Boston, MA, USA

Andrei Brinzeu, C Dumot, G Georgulis, P Mertens, M Sindou. Safety of the sitting position at the 2014 Annual Meeting of the Congress of Neurological Surgeon 18-22 October, Boston, MA, USA

2013

Andrei Brinzeu, Jean-Bernard Caillet, Gustavo Polo, Patrick Mertens. Weaning from high-dose intrathecal morphine by combining oral methadone with intrathecal PRIALT. (in French) "Sevrage de haute dose de morphine intrathecale par association de méthadone orale et de PRIALT® intrathecal". Poster at the 13th National Congress of the French Society for the Evaluation and Treatment of Pain, Paris

2011

A. Brinzeu, D. Patrascu, C. Macarie, C. Brinzeu, A.T. Brinzeu. Evolution of cerebral abscesses after the introduction of a standardized therapy (in French): "L'évolution des abcès cérébraux après l'introduction d'une thérapie standardisée". Poster at the SNCLF congress, Vienna, Austria, June 2011

A. Brinzeu, P. Mertens, M. Sindou. Primary idiopathic syringomyelia treatment by sectioning the filum terminale. Poster at the EANS congress, Rome

A. Brinzeu, S. Driollet Laspiur, E. Simon, P. Mertens, M. Sindou. Apparently primary syringomyelia: treatment by sectioning the filum terminale. (in French) "Syringomyélie en apparence primitive. Traitement par section du filum terminale. Cas illustratif". Poster presented at the 31st Congress of the French National Society of Neurosurgery, Dijon, France, April 2011

2010

F. Aichaoui, A. Brinzeu, M. Sindou. Technique and interest of studying direct masticatory responses and trigemino-facial reflexes in the treatment of trigeminal neuralgia by radiofrequency thermocoagulation (in French): "Technique et Intérêt de l'étude des réponses directes masticatrices et des réflexes"

trigémino-faciaux dans le traitement de la névralgie trigéminal par thermocoagulation RF presentation au congrès de neurochirurgie 2010 à Lyon -

2003

A Brinzeu, A Botke, V Ciocotisan, R Mocanu, O Coste, V Paunescu, G Mihalas Diferente de perceptie dureroasa intre sexe. Poster presented at du 12eme congrès de la Société Roumaine de Physiologie, Cluj, Roumanie

Surgical Experience

Surgical skills (procedures performed independently as primary surgeon) - General neurosurgery

Neurosurgical trauma; hydrocephalus surgery

Degenerative spinal surgery without instrumentation; intraparenchymal tumor surgery

Tumor biopsies and resections; use of neuronavigation; stereotactic biopsy

Awake surgery with stimulation; meningioma surgery

Pain surgery

Neuromodulation

Spinal cord stimulation (all modalities); dorsal root ganglion stimulation

Lesioning surgery

DREZotomy; cordotomy; myelotomy

Juxtapontine rhizotomy; movement disorders surgery

Deep brain stimulation (all indications and implantation techniques); intracerebral lesioning

Surgery for cranial nerve dysfunctions; microvascular decompression

Percutaneous radiofrequency thermocoagulation of cranial nerves; surgery for spasticity and disability

Neurotomies; DREZotomies

Intramedullary tumor surgery; microsurgery (TIM)

Intraoperative monitoring: SSEP/MEP and BAEP, EMG monitoring; epilepsy surgery

Standard temporal lobectomy

Invasive intracerebral exploration (SEEG); focus resection under neuronavigation; callosotomy

Operative experience

During residency, participated in over 1,000 procedures across all areas of neurosurgery, particularly in:

- Meningioma and skull base surgery (Prof. M. Sindou)
- Pain surgery (Prof. P. Mertens, Prof. M. Sindou)
- Movement disorders surgery (Prof. P. Mertens) - deep brain stimulation
- Surgery for spasticity and disability (Prof. P. Mertens, Prof. M. Sindou)
- Epilepsy surgery (Prof. M. Guenot)
- Awake surgery for intraparenchymal tumors (Prof. M. Guenot)
- Intramedullary tumor surgery (Prof. M. Sindou, Prof. C. Barrey)
- Surgery for cranial nerve dysfunctions (Prof. M. Sindou)

Organization and Management

2019 Structuring of the project for a reference center in neuromodulation within the Lyon Neurological Hospital

2014-2019 Coordinator of the operating schedule of Neurosurgery Department A at the Lyon Neurological Hospital

2013 Participation in the development of the "Cease Pain" project coordinated by Dr. L. Garcia Larrea, aiming to structure a European reference network for the diagnosis, treatment and prevention of neuropathic pain. The project sought European funding but was not approved.

2008 Drafting of the "Golden Hour" project to fund training of doctors and nurses in Western Romania in the management of neurological and neurosurgical emergencies. The project was funded with EUR 500,000 by the Romanian Operational Programme for Human Resources Development, financed by European Structural Funds. The project was implemented.

2005 Coordinated a team of ten physicians to review the financial coding of patients discharged in 2005 from SCJUT. 35,000 records were reviewed and 1,000 diagnostic forms were corrected, resulting in a budget adjustment of EUR 750,000.