

## **1. RESEARCH INTEREST**

- Specialized for brain tumor surgery, cerebrovascular and spine surgery.
- Deep interest in glioma, trauma, epilepsy and cerebral microdialysis.
- His clinical and teaching efforts are focused on perfecting surgical techniques, for young neurosurgeons and trainees in his group and abroad.

## **2. EDUCATION**

- 2011 Granted candidate for doctorate (PhD), Medical faculty University of Sarajevo
- 2009 Master of medical sciences (MSc), Medical faculty University of Sarajevo
- 2004 Medical doctor (MD), Medical faculty University of Sarajevo

## **3. WORK EXPERIENCE**

- 2004-today Department of Neurosurgery, Clinical Center University of Sarajevo

## **4. TEACHING EXPERIENCE**

- 2014-today Member and faculty of EANS Training Committee.
- Invited speaker and/or faculty on numerous international neurosurgical courses and congresses including Southeast Europe Neurosurgical Society (SeENS), The European Association of Neurosurgical Societies (EANS), American Association of Neurological Surgeons (AANS) and World Federation of Neurosurgical Societies (WFNS) meetings.

## **5. PROFESSIONAL MEMBERSHIPS**

- World Academy of Neurological Surgery – WANS (2016), Active member
- South East Europe Neurosurgical Society – SEENS (2014), Assist. Secretary and Committee chair
- B&H Medical and Biological Engineering Society – DMBIUBIH (2013), Co-founder
- Bosnian-Herzegovinian-American Academy of Arts and Sciences – BHAAAS (2011), Active member
- American Association of Neurological Surgeons - AANS (2009), Internat. member
- The European Association of Neurosurgical Societies – EANS (2007), Active member
- Association of Neurosurgeons in Bosnia and Herzegovina - UNUBIH (2003), Secretary

## **6. FUNDED PROJECTS**

- 2017-2018 A controlled, randomized, multi-centre, double blind, phase II study to evaluate efficacy and safety of topical PeproStat in intraoperative surgical haemostasis, Prime investigator

- 2011-2016      Decompressive vs Hinge Craniotomy in the treatment of refractory ICH, Prime investigator
- 2010-2012      Levobupivacaine in the control of LBP, Investigator
- 2007-2009      Predictive value of Cerebral Microdialysis in patients with TICH, Prime investigator
- 2005-2007      Neuropsychological appraisal of cognitive function after subarachnoidal hemorrhage, Medical Staff
- 2004-2007      Neurotrauma - IGEH (International Neurotrauma Research Organization ), Medical Staff

## 7. BOOK AND BOOK CHAPTERS

- Omerhodzic I, Arnautovic K (Eds.). Glioma - Contemporary Diagnostic and Therapeutic Approaches, ISBN 978-953-51-6182-0, InTechOpen, 2018.
- Omerhodzic et al. Neurosurgical options for glioma. In: Glioma - Contemporary Diagnostic and Therapeutic Approaches, Omerhodzic I, Arnautovic K (Eds.). ISBN 978-953-51-6182-0, InTechOpen, 2018.
- Omerhodzic, Pojskic M, Arnautovic K. Myxopapillary Ependymomas. In: Spinal cord tumors, Arnautovic K, Gokaslan Z (Eds.), Springer, UK, 2018.
- Omerhodzic I, Burazerovic E. Klinika za neurohirurgiju. In: Hadziahmetovic Z. „120 godina Zemaljske bolnice u Sarajevu 1894. – 2014“. ISBN 978-9958-00-005-8, Institut za NIRR KCUS, Sarajevo, 2014.
- Omerhodzic I, Avdakovic S, Nuhanovic A, Dizdarevic K, Rotim K (2012). Energy Distribution of EEG Signal Components by Wavelet Transform, Wavelet Transforms and Their Recent Applications in Biology and Geoscience, Dumitru Baleanu (Ed.), DOI: 10.5772/2286, ISBN: 978-953-51-0212-0, InTechOpen, March 2012.

## 8. PUBLICATIONS

### In extenso articles (selected)

1. **Omerhodzic I**, Tonge M, Matos B, Musabeliu E, Raspanti C, Ferdinandov D, Galimova R, Muroi C, Balik V, Kursumovic A. Neurosurgical training programme in selected European countries – from young neurosurgeons point of view. Turkish Neurosurgery 2012, 22(3):286-93. (DOI:10.5137/1019-5149.JTN.5133-11.0)
2. Dizdarevic K, Hamdan A, **Omerhodzic I**, Kominlija-Smajic E. Modified Lund concept versus cerebral perfusion pressure-targeted therapy: A randomised controlled study in patients with secondary brain ischaemia. Clin Neurol Neurosurg. 2012 Feb;114(2):142-8 (DOI:10.1016/j.clineuro.2011.10.005) (Indexed in Current Contents, MEDLINE, SCI etc.)
3. **Omerhodzic I**, Dizdarevic K, Rotim K, Hajdarpasic E, Niksic M, Bejtovic-Custovic E, Selimovic E, Custovic M. Cerebral microdialysis: perioperative monitoring and treatment of severe neurosurgical patient. Acta Clin Croat 2011; Mar;50(1):13-20.

4. **Omerhodzic I**, Avdakovic S, Nuhanovic A, Dizdarevic K. Energy distribution of EEG signals: EEG signal wavelet-neural network classifier. World Academy of Science, Engineering and Technology 2010; 61: 1190-5
5. Dizdarevic K, **Omerhodzic I**, Kelle H. Importance of Lund concept and cerebral microdialysis in the postoperative treatment of poor grade patients after aneurysmal haemorrhage. Medimond Interantional Proceedings. 13th European Congress of Neurosurgery, Glasgow, UK, 2007., pp 505-511
6. Masic I, Novo A, Deljkovic S, **Omerhodzic I**, Piralic A. How to assess and improve quality of medical education; lessons learned from faculty of Medicine in Sarajevo. Bosn J Basic Med Sci 2007; 7(1); 74-8
7. **Omerhodžić I**, Mašić I. Mjerenje kvaliteta medicinske edukacije sa posebnim osvrtom na Medicinski fakultet Univerziteta u Sarajevu. Acta informatica medica 2006; 14 (2): 88-93
8. **Omerhodzic I**, Masic I. Department of Neurosurgery, Clinical Center University of Sarajevo: Brief History and Current Achivements. Materia socio medica 2006; 18 (1): 41-44
9. Rusnak M, Dizdarevic K, **Omerhodzic I**, Soljakova M, Splavski B, Vukic M, Giroto D, Masic I. Traumatic Brain Injury (TBI) Guidelines. Acta informatica medica 2006; 14 (1): 10-12
10. Dizdarevic K, **Omerhodzic I**, Iblizovic N, Jahic B. Neurosurgical Intensive Care Unit and computerized technology as a prereuisite of cotemporary approach to the neuropatients. Medicinski žurnal 2005; 11 (1-2): 18-23

#### Abstracts in refereed journals (selected)

1. **Omerhodzic I**, Rovcanin B, Lisica D, Bilalovic N. Case report of cerebellar epitheloid hemangioendothelioma. 3rd Congress of Pathologists of Bosnia and Herzegovina with international participation. Sarajevo, Bosnia-Herzegovina, 2-3 November 2016. Abstract book (Folia Medica Journal) p. 46
2. **Omerhodžić I**, Burazerović E, Zahirović S, Džurlić A, Ahmetpahić A, Lisica D, Mašović A, Huskić V, Kadić A, Rovčanin B. Vertical Incision and Keyhole Craniotomy in Supratentorial Tumor Surgery. J Neurol Surg A Cent Eur Neurosurg 2015; 76 - A018 (DOI: 10.1055/s-0035-1566337)
3. **Omerhodzic I**, Ahmetpahic A, Zahirovic S, Rotim K, Arnautovic K. Decompressive Craniectomy VS Hinge Craniotomy in Patients with Severe Traumatic Brain Injury - A Prospective Study. Journal of Neurotrauma, 2014. 5: A38-A38
4. **Omerhodžić I**, Maksić H, Čengić-Hadžović M, Avdagić E, Imširović B, Zahirović S, Al Qoud H, Selimović E, Koluder N. Treatment of VRE Meningitis in a Four-Month-Old Infant with Intraventricular Tobramycin Application. Mat Soc Med. 2012 Jun; 24(Suppl 1): 29 Summaries. (Doi: 10.5455/msm.2012.24.s20-s31)
5. **Omerhodžić I**. Complex neurotrauma – treatment and monitoring. 3rd Congress of otorynolaringology and cervicofacial surgeons of the Federation of Bosnia and Herzegovina, Konjic, Oct. 6th-8th 2011. Acta Medica Saliniana 2011; 40 (Suppl.2):38
6. **Omerhodžić I**, Zahirović S, Dizdarević D, Efendić R, Merhemić Z, Imširović B. Surgical care of anterior skull base defects. 3rd Congress of Otorynolaringology and

- cervicofacial surgeons of the Federation of Bosnia and Herzegovina, Konjic, Oct. 6th-8th 2011. Acta Medica Saliniana 2011; 40 (Suppl.2):39
7. **Omerhodzic I**, Avdakovic S, Dizdarevic K, Nuhanovic A. Wavelet transform based analysis of EEG signals and indicators of epilepsy. Acta Clin Croat 2011;50(suppl 1):42
  8. **Omerhodzic I**, Burazerovic E, Al Qoud H, Jakirlic M, Dujso V, Babic A. Primary team approach for large myelomeningocele repair. Child Nerv Syst 2010;26:545-592
  9. **Omerhodzic I**, Rotim K, Dizdarevic K, Hajdarpasic E: Could cerebral microdialysis improve outcome of severe TBI patients? Neurol Croat 2008;57(suppl 3):160
  10. **Omerhodzic I**, Banjanovic B, Barucija M, Salihovic A. Digital Medical Learning And New Era of Publishing in BiH. Med Arh 2004;58(suppl 2):144

### **Congresses, Conferences and Presentations (recent, selected)**

1. **Omerhodzic I**. Neurosurgical training program in Europe: EANS and SEENS Perspective. SEENS-Semmes-Murphey Clinic: Leadership Symposium. Memphis, TN, USA, May 3-4, 2018 (Invited Speaker)
2. **Omerhodzic I**. Brain tumors in teens - how to deal with strange pathological findings. American Association of Neurological Surgeons – AANS, 86<sup>th</sup> Annual Scientific Meeting. New Orleans, LA, USA, April 28-May 2, 2018 (Invited speaker at International Symposium)
3. **Omerhodzic I**. Management of craniocervical trauma and instability - DG. European Association of Neurosurgical Society (EANS) Training Course. Edinburgh, Scotland, UK, January 28-31, 2018 (Faculty)
4. **Omerhodzic I**. Spinal Cord Ependymoma Surgery. The 3rd Congress of Southeast Europe Neurosurgical Society – SEENS. Cluj-Napoca, Romania, September 14-15, 2017 (Invited Faculty)
5. **Omerhodzic I**. Decompressive hemicraniectomy for stroke. European Association of Neurosurgical Society (EANS) Training Course. Sevilla, Spain, September 1-4, 2017 (Faculty)
6. **Omerhodzic I**. Filum Terminale and Conus Medullaris Ependymoma. World Federation of Neurosurgical Societies. XVI World Congress of Neurosurgery. August 20-25, 2017. Istanbul Congress Center, Turkey. (Invited Faculty)
7. **Omerhodzic I**. Posterior Fossa Lesions – Pathology Gives Surprises When You Least Expect Them. World Academy of Neurological Surgery. 17 – 20 August 2017, Istanbul, Turkey (Faculty)
8. **Omerhodzic I**. Pontocerebellar and Petroclival Region Tumors – Epidemiology, Presentation, Natural course, Differential diagnosis, Treatment. The SeENS International Neurosurgery Course - a joint venture with the WFNS Neurosurgical Anatomy Committee, Koç University, and Istanbul Congress Center, Turkey, August 18-20, 2017 (Faculty)
9. **Omerhodzic I**. Three and four levels ACDF for cervical degenerative disc disease. The 5th Spine Symposium of the Southeast Europe Neurosurgical Society and the Croatian Spine Society under the patronate of the Croatian Academy of Arts and Sciences. Zagreb, Croatia, June 9th 2017 (Guest of honor)

10. **Omerhodzic I.** Management of craniocervical trauma and instability. European Association of Neurosurgical Society (EANS) Training Course 2017, Prague, Czech Republic, May 7-10, 2017 (Faculty)
11. **Omerhodzic I.** The choosing of appropriate approaches to unusual posterior fossa lesions. 85<sup>th</sup> American Association of Neurological Surgeons (AANS) Annual Scientific Meeting. Los Angeles, CA, USA. April 22-26, 2017 (Invited speaker at International Symposium)
12. **Omerhodzic I.** Management of craniocervical trauma and instability. European Association of Neurosurgical Society (EANS) Training Course 2016, Berlin, Germany, Oct. 2-5, 2016 (Faculty)
13. **Omerhodzic I.** Surgery of intradural spinal tumors - single center experience. The 16th European Congress of Neurosurgery - EANS 2016, Athens, Greece, Sept. 4 – 8, 2016 (Faculty)
14. **Omerhodzic I.** Hypothalamic and chiasmatic tumours.- DG. European Association of Neurosurgical Society (EANS) Training Course. Sofia, Bulgaria, February 7-10, 2016 (Faculty)
15. **Omerhodzic I.** Vertical incision in supratentorial pathology. The 5th Symposium of World Federation of Neurosurgical Societies - WFNS, Tehran, Iran, April, 17th-22nd, 2016. (Invited Speaker)
16. **Omerhodžić I.** Novelities in EEG Analysis of Patients with Epilepsy. International Symposium – New frontiers in epilepsy, functional and peripheral nerve surgery. Montenegrin Academy of Sciences and Arts. Podgorica, Monte Negro, June 19<sup>th</sup>, 2015. (Invited speaker)
17. **Omerhodzic I.** Incidental aneurysms - DG. European Association of Neurosurgical Society (EANS) Training Course. Uppsala, Sweden, January 25-29, 2015 (Faculty)