

Roadmap to Neurosurgery – from Student to Resident

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Abstract

Neurosurgery is a medical speciality that diagnoses and treats brain and spine pathologies of infants, children, and adults, having 2 components: clinical and surgical activities. The history of neurosurgery dates back to the Prehistoric Period when first trepanations took place. However, the extensive amount of information we use today was discovered and invented thanks to Joseph Lister (1827-1912), William T.G. Morton (1819-1868) and Pierre Paul Broca (1823-1880) who implemented systematic antisepsis rules, anaesthesia and, respectively, the localization of different areas of the brain. Nevertheless, professors such as Harvey Cushing (1869-1939) and Gazi Yasargil (n.1925) are responsible for the definition of neurosurgery as a stand-alone surgical specialty and the significant improvement of the surgical techniques. Moreover, Professor Dumitru Bagdasar (1893-1946) is the one responsible for the introduction of neurosurgery in Romania, training a “golden neurosurgeon team” who are remarked as the first neurosurgeons of Romania. Even though it is such a new medical field, a vast amount of theoretical and practical study is necessary. Therefore, a student needs dedication and lots of effort to achieve perfection in one of the most complex medical speciality, requiring more than 100 exams and over 14,900 hours of practice during the 6 years of medical school and 6 years of neurosurgical residency. Still, even if it seems a lot at first, the moral rewards stand out in the end due to the significant contrast between the preoperative and post-operative condition of the patient. Nevertheless, some of the students might be negatively influenced by family and friends through different myths that neurosurgery is a goal that is almost impossible to be achieved since the amount of practice and sacrifices it requires are a lot bigger than other medical specialities. In conclusion, neurosurgery accomplished to overcome the mystery of the human brain and developed at a fast pace. Today, neurosurgeons around the world treat more and more pathologies that seemed incurable and inoperable 100 years ago.

Key words: neurosurgery, medical student, education