



The overshadowed scientific endeavours of Berengario Da Carpi, a renaissance physician and the Forerunner of neurosurgery: a historical vignette

Bruno Splavski^{a,b,c,d}, Kresimir Rotim^{a,b,c}, Frederick A. Boop^{e,f,g}, Andrew J. Gienapp^{f,g}  and Kenan I. Arnautovic^{e,f}

^aDepartment of Neurosurgery, Sisters of Mercy University Hospital Center, Zagreb, Croatia; ^bSchool of Medicine, “J. J. Strossmayer” University, Osijek, Croatia; ^cUniversity of Applied Health Sciences, Zagreb, Croatia; ^dSchool of Dental Medicine and Health, “J. J. Strossmayer” University, Osijek, Croatia; ^eSemmes Murphey Clinic, Memphis, TN, USA; ^fDepartment of Neurosurgery, University of Tennessee Health Science Center, Memphis, TN, USA; ^gNeuroscience Institute, Le Bonheur Children’s Hospital, Memphis, TN, USA

ABSTRACT

Jacopo Berengario da Carpi was Renaissance-era physician, surgeon, and anatomy lecturer who transformed medieval anatomy and surgery—which were, at the time, dominated mostly by religious dogma—into a modern science based on direct observation, experience, and cadaveric dissection. He was an accomplished and innovative neuroanatomist and educator, a prolific researcher and publisher, and a successful practicing surgeon who treated the head injuries of many renowned patients of that period. He published a landmark commentary on skull fractures that was the first printed book in history devoted to head injuries, which became a model of new medical understanding. Nonetheless, Berengario’s achievements in anatomy, medicine, neuroanatomy, and what would later become neurotraumatology and neurosurgery, would have been more widely known had his work and research not been surpassed by Andreas Vesalius and Ambroise Paré, both of whom advanced anatomic and medical knowledge even further. In this historical vignette, we discuss the political conditions of sixteenth Century Italy and pay a homage to Berengario da Carpi, emphasizing his work in establishing neuroanatomy as a field of medicine that became a precursor to modern neuroscience. We also describe the improvements he made in neurotraumatology technique and instrumentation, and his explanations of skull fractures and other brain injuries outlined in ground-breaking clinical books he published. Finally, we try to elucidate possible reasons why his scientific and professional achievements—despite of their enormous impact—were overshadowed by the achievements of his more famous immediate successors.

ARTICLE HISTORY

Received 26 June 2020
Revised 3 December 2020
Accepted 7 December 2020

KEYWORDS

Berengario da Carpi;
sixteenth century history;
books; Italy; neuroanatomy;
neurotraumatology; neuro-
surgery; surgical tools