

A Virtual Neuroanaesthetic Circa 1910

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In the early 20th century, neurosurgery was truly in its adolescence. The advent of general and local anaesthesia 50 years before had revolutionised the specialty, allowing elective surgical procedures to occur, in addition to emergency operations for the treatment of intracranial bleeding. Antiseptic and aseptic techniques, much beloved of modern neurosurgeons, were well established. However, the precise localization of surgical pathology was only in its infancy and clinicians relied heavily on clinical history and examination when planning operations. Furthermore, pituitary and cerebral vascular surgeries were in their infancies, and the operating microscope and sophisticated imaging techniques were still at least 50 years into the future.

Enter Harvey Cushing, the so-called “father” of modern neurosurgery”. Born in 1869, Cushing studied medicine at Harvard Medical School and completed his residency in surgery at the Johns Hopkins Hospital, in Baltimore. During his medical career he was a surgeon at Johns Hopkins Hospital and the Peter Bent Brigham Hospital in Boston. He considerably improved the survival of patients after difficult brain operations for intracranial tumors, used x-rays to diagnose brain tumors, used electrical stimuli for study of the human sensory cortex, played a pivotal role in development of electrocautery, pioneered pituitary surgery and described Cushing’s Disease. He was the world’s leading teacher of neurosurgeons in the first decades of the 20th century, and wrote an award-winning biography of William Osler. In the field of anaesthesia, Cushing’s greatest contributions came with his introduction to North America of blood pressure measurement and of the anaesthesia record, and his employment of the first independent neurosurgical anesthetist, Dr S Griffith Davis. In 1910, Dr Cushing and Davis were at the peak of their powers...

Reference: <http://cushing.med.yale.edu/cushing/index.html>