

Emil Theodor Kocher

The Swiss surgeon and Nobel Prize laureate Emil Theodor Kocher was among the first physicians to describe the traumatic rupture of the IVD in 1896 ¹⁾.

Kocher also contributed significantly to the field of neurology and neurosurgery. In this area, his research was pioneering and covered the areas of concussion, neurosurgery and intracranial pressure (ICP).

Furthermore, he investigated the surgical treatment of epilepsy and spinal and cranial trauma. He found that in some cases, the epilepsy patients had a brain tumor which could be surgically removed. He hypothesized that epilepsy was caused by an increase in ICP and believed that drainage of cerebrospinal fluid could cure epilepsy.

The Japanese surgeon [Hayazo Ito](#) came to [Bern](#) in 1896 in order to perform experimental research on epilepsy. Kocher was especially interested in the ICP during experimentally induced epilepsy and after Ito returned to Japan, he performed over 100 surgeries in epilepsy patients.

The American surgeon Harvey Cushing spent several month in the lab of Kocher in 1900, performing cerebral surgery and first encountering the Cushing reflex which describes the relationship between blood pressure and intracranial pressure. Kocher later also found that decompressive craniectomy was an effective method to lower ICP.

In his surgery textbook *Chirurgische Operationslehre*, Kocher dedicated 141 pages of 1060 pages to surgery of the nervous system. It included methods of exploration and decompression of the brain.

The concept of decompressive surgery for treatment of elevated intracranial pressure has been developed already in the beginning of the 20th century by [Emil Theodor Kocher](#). ²⁾.

Emil Theodor Kocher (25 August 1841 – 27 July 1917) was a Swiss physician and medical researcher who received the [1909](#) Nobel Prize in Physiology or Medicine for his work in the physiology, pathology and surgery of the thyroid. Among his many accomplishments are the introduction and promotion of aseptic surgery and scientific methods in surgery, specifically reducing the mortality of thyroidectomies below 1% in his operations.

He was the first Swiss citizen and the first surgeon to ever receive a Nobel prize. He was considered a pioneer and leader in the field of surgery in his time.

Unclassified

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1)

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Cushing H. The establishment of cerebral hernia as a decompressive measure for inaccessible brain tumors; with the description of intermuscular methods of making the bone defect in temporal and occipital regions. *Surg Gynecol Obstet*. 1905;1:297-314

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