

Norman McOmish Dott

Norman McOmish Dott (1897-1973) developed surgical neurology in [Edinburgh, Scotland](#), and was a scholar of worldwide renown. One of Dott's most notable contributions to neurosurgery was his understanding of hypothalamic physiology, mostly acquired through the comprehensive study of patients with lesions involving this region of the diencephalon, particularly craniopharyngiomas (CPs). Recognition of symptoms caused by hypothalamic disturbances allowed him to predict the accurate anatomical relationships between CPs and the hypothalamus, despite the rudimentary radiological methods available during the 1930s. His sophisticated knowledge permitted Dott to perform radical removals of CPs originating within the third ventricle floor with acceptable success. Between 1934 and 1937, he operated on 4 CP cases originating in the hypothalamus, achieving a satisfactory postoperative outcome in 3 of the 4 patients. Aware of the strong attachment of hypothalamic CPs to the infundibulo-tuberal area, Dott used a double transbasal and transventricular approach to these lesions, a strategy providing an optimal view and control of the tumor boundaries. The decisive mentorship of several legendary figures of physiology and neurosurgery greatly influenced Dott's surgical evolution. The experimental pituitary gland work he performed with Sir Edward Sharpey-Schäfer at the beginning of his career stirred Dott's curiosity about the issue of hypothalamus-pituitary relationships. As a result, he decided to move to Peter Bent Brigham Hospital (Boston, Massachusetts) in 1923, to train in neurosurgery and neuropathology under the guidance of the leaders in these fields, Harvey Williams Cushing (1869-1939) and Percival Sylvester Bailey (1892-1973). They inspired the young Dott and shared with him their clinical and pathological expertise, in addition to their surgical strategies for best approaching and removing these challenging tumors. In time, Dott would come to surpass his mentors ¹⁾.

[Gerard Guiot](#), inspired by [Norman McOmish Dott](#), adopted his technique and used intraoperative radiofluoroscopic technique for image guidance. [Jules Hardy](#), a fellow of Guiot, from [Montreal, Canada](#), revolutionized transsphenoidal microsurgery with the introduction of the binocular microscope and selective adenomectomy ²⁾.

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Prieto R, Pascual JM. Norman M. Dott, master of hypothalamic craniopharyngioma surgery: the decisive mentoring of Harvey Cushing and Percival Bailey at Peter Bent Brigham Hospital. *J Neurosurg.* 2017 Jan 6;1-14. doi: 10.3171/2016.9.JNS16702. [Epub ahead of print] PubMed PMID: 28059655.

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Patel SK, Husain Q, Eloy JA, Couldwell WT, Liu JK. Norman Dott, Gerard Guiot, and Jules Hardy: key players in the resurrection and preservation of transsphenoidal surgery. *Neurosurg Focus.* 2012 Aug;33(2):E6. doi: 10.3171/2012.6.FOCUS12125. PubMed PMID: 22853837.

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