Craniopharyngioma endoscopic endonasal approach complications

Schwartz et al., from the Weill Cornell Brain and Spine Center, compared surgical results for Endoscopic skull base surgery (ESBS) with transcranial surgery (TCS) for several different pathologies over two different time periods (prior to 2012 and 2012-2017) to see how results have evolved over time. Pathologies examined were craniopharyngioma, anterior skull base meningioma, esthesioneuroblastoma, chordoma, and chondrosarcoma.

ESBS offers clear advantages over TCS for most craniopharyngiomas and chordomas. For well-selected cases of planum sphenoidale and tuberculum sellae meningiomas, ESBS has similar rates of resection with higher rates of visual improvement, and more recent results with lower CSF leaks make the complication rates similar between the two approaches. TCS offers a higher rate of resection with fewer complications for olfactory groove meningiomas. ESBS is preferred for lower-grade esthesioneuroblastomas, but higher-grade tumors often still require a craniofacial approach. There are few data on chondrosarcomas, but early results show that ESBS appears to offer clear advantages for minimizing morbidity with similar rates of resection, as long as surgeons are familiar with more complex inferolateral approaches.

ESBS is maturing into a well-established approach that is clearly in the patients' best interest when applied by experienced surgeons for appropriate pathology. Ongoing critical reevaluation of outcomes is essential for ensuring optimal results [1].

EES was associated with similar, if not better, extent of resection and significantly less ischemic injury than open surgery. Pseudoaneurysms were only seen in the open surgical group. Weight gain was also less prevalent in the EES cohort and appears be correlated with extent of ischemic injury at time of surgery [2].

1)
Schwartz TH, Morgenstern PF, Anand VK. Lessons learned in the evolution of endoscopic skull base surgery. J Neurosurg. 2019 Feb 1;130(2):337-346. doi: 10.3171/2018.10.JNS182154. Review. PubMed PMID: 30717035.
2)
Madsen PJ, Buch VP, Douglas JE, Parasher AK, Lerner DK, Alexander E, Workman AD, Palmer JN, Lang SS, Kennedy BC, Vossough A, Adappa ND, Storm PB. Endoscopic endonasal resection versus open surgery for pediatric craniopharyngioma: comparison of outcomes and complications. J Neurosurg Pediatr. 2019 Jun 7:1-10. doi: 10.3171/2019.4.PEDS18612. [Epub ahead of print] PubMed PMID: 31174192.

From:
https://neurosurgerywiki.com/wiki/ - **Neurosurgery Wiki**

Permanent link:
https://neurosurgerywiki.com/wiki/doku.php?id=craniopharyngioma_endoscopic_endonasal_approach_complications

Last update: **2024/06/07 03:00**