

Cossu G et al. Surgical management of craniopharyngiomas in adult patients: a systematic review and consensus statement on behalf of the EANS skull base section. Acta Neurochir (Wien). 2020;162(5):1159-77. doi: 10.1007/s00701-020-04265-1.

BACKGROUND AND OBJECTIVE: Craniopharyngiomas are locally aggressive neuroepithelial tumors infiltrating nearby critical neurovascular structures. The majority of published surgical series deal with childhood-onset craniopharyngiomas, while the optimal surgical management for adult-onset tumors remains unclear. The aim of this paper is to summarize the main principles defining the surgical strategy for the management of craniopharyngiomas in adult patients through an extensive systematic literature review in order to formulate a series of recommendations.

MATERIAL AND METHODS: The MEDLINE database was systematically reviewed (January 1970-February 2019) to identify pertinent articles dealing with the surgical management of adult-onset craniopharyngiomas. A summary of literature evidence was proposed after discussion within the EANS skull base section.

RESULTS: The EANS task force formulated 13 recommendations and 4 suggestions. Treatment of these patients should be performed in tertiary referral centers. The endonasal approach is presently recommended for midline craniopharyngiomas because of the improved GTR and superior endocrinological and visual outcomes. The rate of CSF leak has strongly diminished with the use of the multilayer reconstruction technique. Transcranial approaches are recommended for tumors presenting lateral extensions or purely intraventricular. Independent of the technique, a maximal but hypothalamic-sparing resection should be performed to limit the occurrence of postoperative hypothalamic syndromes and metabolic complications. Similar principles should also be applied for tumor recurrences. Radiotherapy or intracystic agents are alternative treatments when no further surgery is possible. A multidisciplinary long-term follow-up is necessary.