

Suprasellar meningioma

Suprasellar [meningioma](#) is a [intracranial meningioma](#).

Classification

[Suprasellar meningioma classification](#).

Clinical features

Its clinical manifestations are mainly monocular or binocular hypopsia and bitemporal hemianopsia, optic atrophy without papilloedema, and smell and mental disorders. However, some patients exhibit endocrine disorders ¹⁾. The most common symptoms are [visual disturbance](#) (58 %), [headache](#) (16 %) and incidental finding (12 %). The mean duration of symptoms was 13 months. [Hyperprolactinemia](#) was found in 36 %, with mean value of 51.6 ng/ml (median 41.8, range 22.5-132). ²⁾.

Diagnosis

Mean maximal diameter was 2.9 cm (median 2.7, range 0.9-6.8), and most tumors enhanced homogeneously on MRI after gadolinium. A [dural tail](#) sign was reported in a third. The radiologist reported "likely meningioma" in 65 %, "possible meningioma" in 8.7 %, and [pituitary neuroendocrine tumor](#) in 11 %. The diagnosis is suggested by the radiologist in approximately 2/3 of the cases. An improved method to differentiate preoperatively these tumors from adenomas would be desirable ³⁾.

Treatment

see [Suprasellar meningioma treatment](#).

Outcome

After surgery, visual disturbances improved in most patients (80 %) but headache only in 7 %. Post-operative complications at 1 and 3 months occurred 38.6 and 33.3 % respectively. There was no mortality. Sellar/suprasellar meningiomas represent 4 % of all meningiomas, and have a particularly high female predominance. ⁴⁾.

Systematic reviews

conducted a PRISMA-compliant systematic review of existing literature detailing the outcomes of both approaches. PubMed, Embase, Cochrane Library, and Clinicaltrials.gov were searched. Studies were

included if they analyzed TS and/or PS meningiomas, included ≥ 5 patients, and reported at least one outcome of interest.

Results: Overall, 44 retrospective studies met inclusion criteria, the majority being from single centers, between 2004 and 2020. In studies directly comparing postoperative outcomes among TCA and EEA approaches, EEA had significantly higher odds of visual improvement (OR = 3.24, $p = 0.0053$) and significantly higher odds of CSF leak (OR = 3.71, $p = 0.0098$) relative to TCA. Further, there were no significant differences between visual worsening ($p = 0.17$), complications ($p = 0.51$), and GTR rates ($p = 0.30$) for the two approaches. Meta-analysis demonstrated no significant association between nasoseptal flap (NSF) use and postoperative outcomes among EEA patients. There was also no significant association between the study publication year and postoperative EEA outcomes.

The present study demonstrates that EEA offers a viable alternative to TCA in the treatment of [suprasellar meningiomas](#). In particular, EEA shows promise for superior visual outcomes, though postoperative CSF leaks are an important consideration among patients undergoing this approach ⁵⁾.

1)

Ceylan S, Koc K, Anik I. Extended endoscopic approaches for midline skull-base lesions. *Neurosurg Rev.* 2009;32:309-19.

2) 3) 4)

Kwancharoen R, Blitz AM, Tavares F, Caturegli P, Gallia GL, Salvatori R. Clinical features of sellar and suprasellar meningiomas. *Pituitary.* 2013 Aug 22. [Epub ahead of print] PubMed PMID: 23975080.

5)

Jimenez AE, Harrison Snyder M, Rabinovich EP, Malkawi D, Chakravarti S, Wei O, Cheshire M, Carrie Price MLS, Khalafallah AM, Rowan NR, Mukherjee D. Comparison and evolution of transcranial versus endoscopic endonasal approaches for suprasellar Meningiomas: A systematic review. *J Clin Neurosci.* 2022 May;99:302-310. doi: 10.1016/j.jocn.2022.03.029. Epub 2022 Mar 21. PMID: 35325729.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=suprasellar_meningioma

Last update: **2024/06/07 02:49**

