

# Extended endoscopic endonasal transtuberculum sellae approach

see also [Extended endoscopic endonasal transsphenoidal approach](#).

---

The Extended endoscopic endonasal transtuberculum sellae approach represents a versatile route for the treatment of [sellar/suprasellar](#) pathologies. Although, sizeable extrasellar pituitary tumors still pose a threat due to displacement/encasement of surrounding structures, necessitating accurate knowledge of correlative operative anatomy with traditional landmarks. Complete resection of extrasellar components is essential to avoid postoperative [apoplexy](#).

The nuances of this [technique](#) have rendered a safe, direct, and feasible ventral corridor for the treatment of extending [suprasellar](#) pathologies. A study of Silveira-Bertazzo et al. illustrates surgical [landmarks](#) and strategies of paramount importance for [complications](#) avoidance, which can be used to remove large pituitary neuroendocrine tumors with suprasellar extension. Special references to cadaveric dissections highlight anatomical landmarks and surgical key points for complications avoidance <sup>1)</sup>.

## Case reports

A 64-year-old woman with progressive bilateral [vision loss](#), including [visual acuity](#) deficits and [bitemporal hemianopsia](#). MRI revealed a 2-cm [tuberculum sellae meningioma](#) causing optic apparatus compression. An extended endoscopic endonasal transtuberculum approach was utilized for gross-total resection, including microdissection of tumor from the [optic chiasm](#) and [infundibulum](#). The closure was performed with multilayer tensor [fascia lata](#) autograft and a pedicled nasal-septal flap. The patient's postoperative exam showed visual improvement and normal [pituitary gland function](#). The [video](#) can be found in: [https://youtu.be/ZfNB\\_rhlyel](https://youtu.be/ZfNB_rhlyel).

## Literature

Laufer I, Anand VK, Schwartz TH. Endoscopic, endonasal extended transsphenoidal, [transplanum transtuberculum approach](#) for resection of [suprasellar lesions](#). J Neurosurg. 2007;106:400-6.

Kassam AB, Gardner PA, Snyderman CH, Carrau RL, Mintz AH, Prevedello DM. Expanded endonasal approach, a fully endoscopic transnasal approach for the resection of midline [suprasellar craniopharyngiomas](#): A new classification based on the infundibulum. J Neurosurg. 2008;108:715-28.

Cavallo LM, Frank G, Cappabianca P, Solari D, Mazzatenta D, Villa A, et al. The [endoscopic endonasal approach](#) for the management of [craniopharyngiomas](#): A series of 103 patients. J Neurosurg. 2014;121:100-13.

Sankhla SK, Jayashankar N, Khan GM. Surgical management of selected [pituitary macroadenomas](#) using [extended endoscopic endonasal transsphenoidal approach](#): Early experience. Neurol India.

2013;61:122-30.

Conger AR, Lucas J, Zada G, Schwartz TH, Cohen-Gadol AA. Endoscopic extended transsphenoidal resection of craniopharyngiomas: Nuances of neurosurgical technique. Neurosurg Focus. 2014;37:E10.

1)

Silveira-Bertazzo G, Albonette-Felicio T, Carrau RL, Prevedello DM. Surgical anatomy and nuances of the extended endoscopic endonasal transtuberculum sellae approach: pearls and pitfalls for complications avoidance. Acta Neurochir (Wien). 2020 Nov 6. doi: 10.1007/s00701-020-04625-x. Epub ahead of print. PMID: 33156946.

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

Permanent link:  
[https://neurosurgerywiki.com/wiki/doku.php?id=extended\\_endoscopic\\_endonasal\\_transtuberculum\\_sellae\\_approach](https://neurosurgerywiki.com/wiki/doku.php?id=extended_endoscopic_endonasal_transtuberculum_sellae_approach)

Last update: **2024/06/07 02:51**

