

Expanded Endoscopic Skull Base Surgery

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¹NEUROSURGEON

²RHINOLOGIC SURGEON

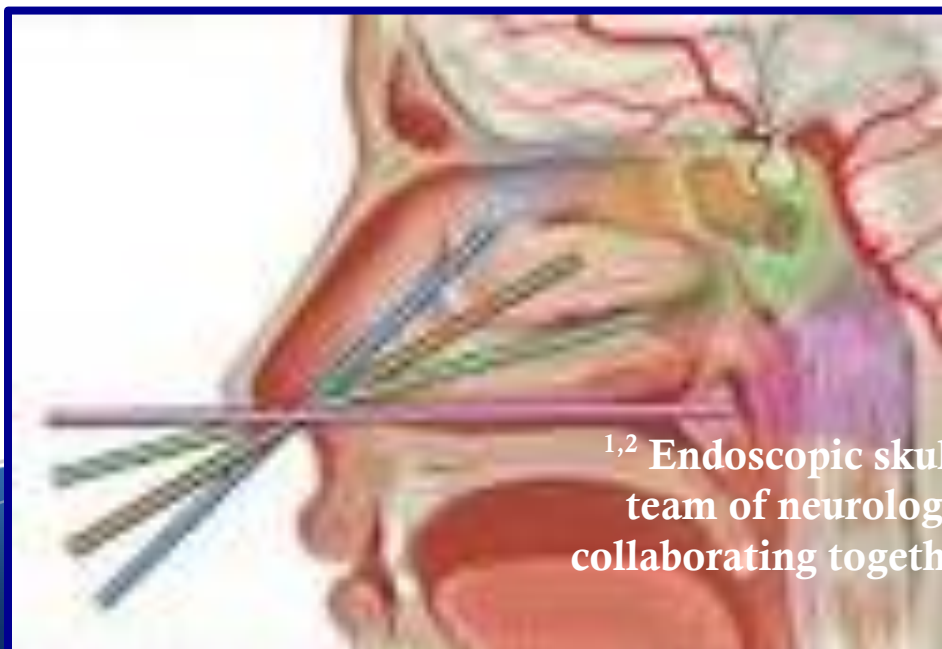


Endoscopic skull base surgery can expand beyond

the midline sella compartment and into parasellar corridors. The expanded corridors are listed on the right. The following two cases will illustrate the expanded technique of removing tumors in separate regions of the brain via a transnasal endoscopic technique. The suprasellar lesion is approached by removing the planum sphenoidale (bony roof of sphenoid sinus). This allows access to the chiasm and third ventricle. The second case extends laterally from the clivus via a transpterygoid approach to the middle and posterior fossa via the petrous apex.

Expanded

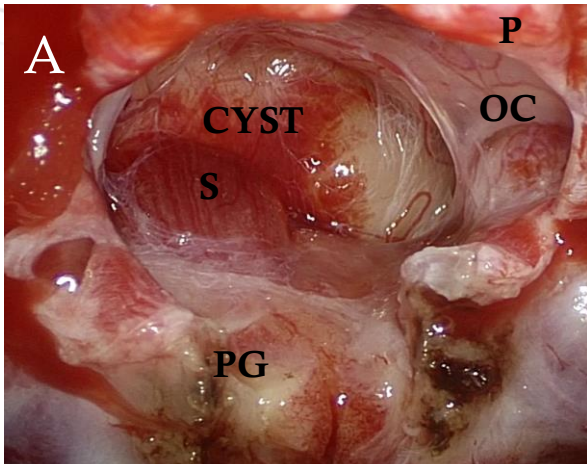
Suprasellar	Transplanum, optic chiasm, 3 rd Ventricle
Laterally	Transpterygoid, infratemporal fossa, Meckel's cave, petrous apex, cavernous sinus
Inferiorly	Clivus, foramen magnum, odontoid/C2, basilar artery, pons
Anteriorly	Cribriform, sub frontal



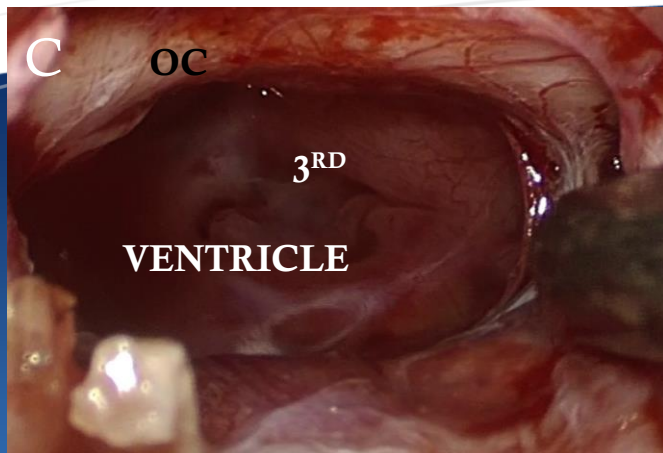
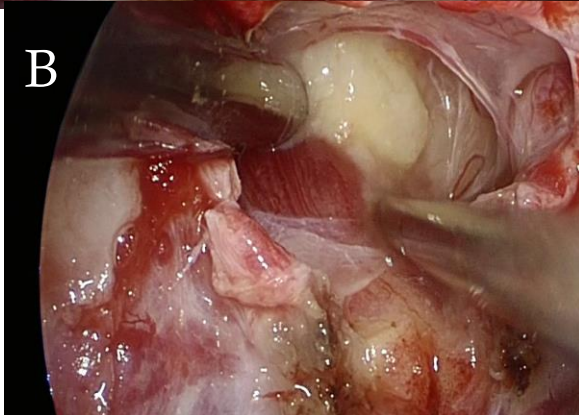
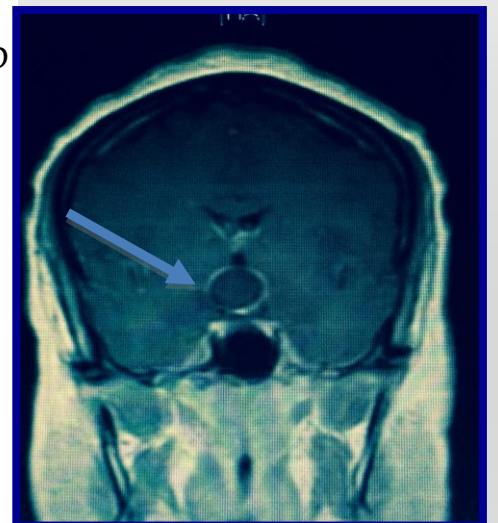
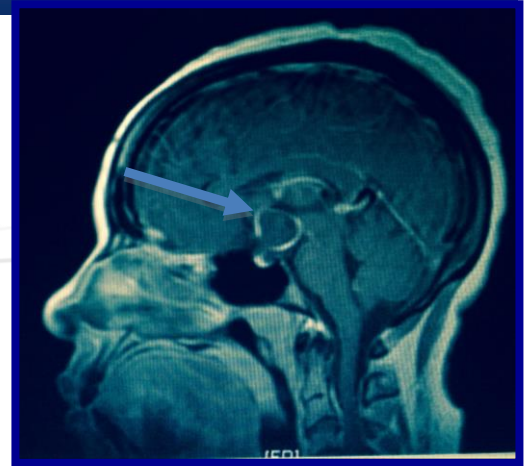
^{1,2} Endoscopic skull base surgery comprises a team of neurologic and rhinologic surgeons collaborating together to remove brain tumors through the nose.

SUPRASellar CYST

This patient presented with visual disturbance and headache.



P = PLANUM
SPHENOIDALE
OC = OPTIC CHIASM
S = STALK,
PG= PITUITARY GLAND

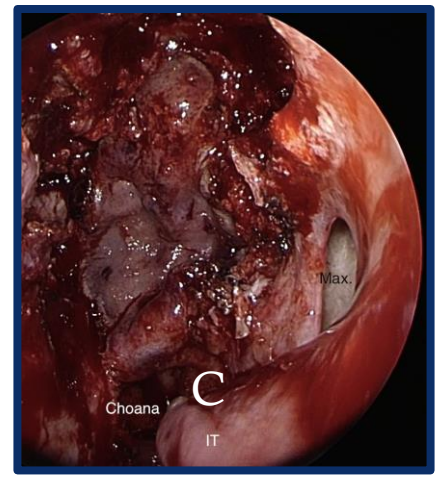
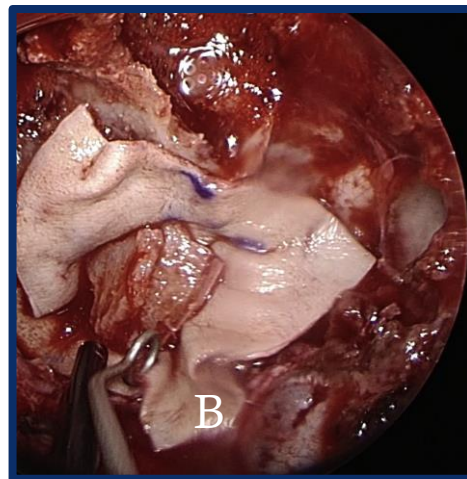
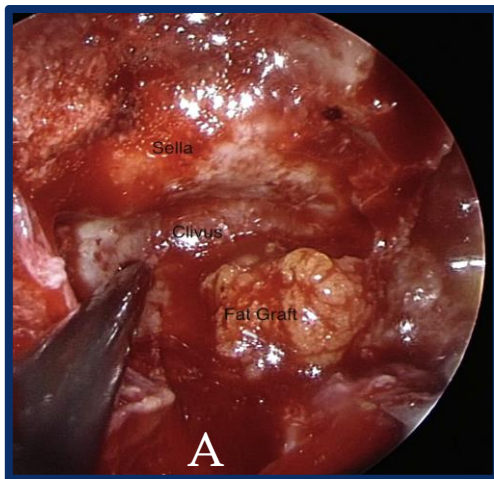
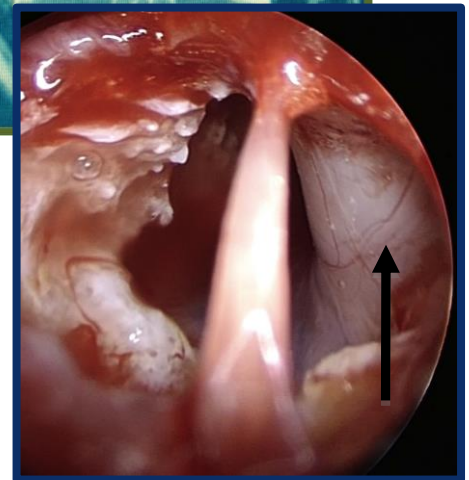
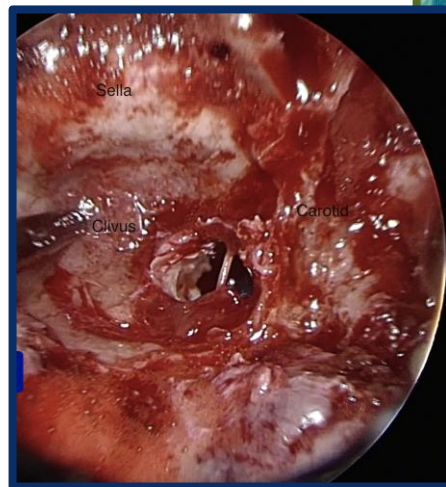
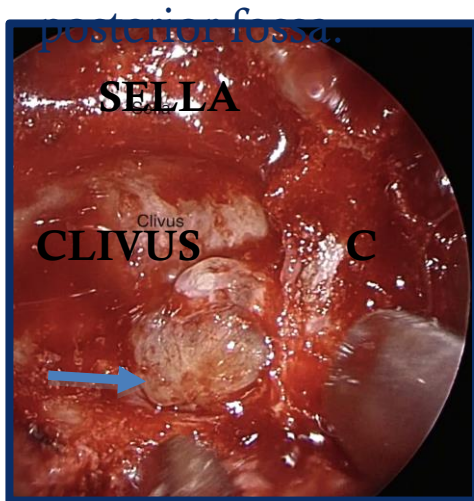
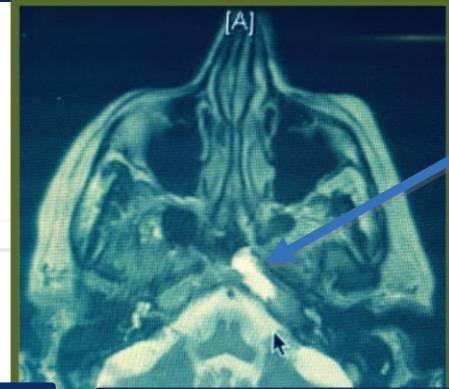


Suprasellar cyst MRI's and intra-operative views

The blue arrows point on the MRI's to the suprasellar cyst in the sagittal view above and coronal view below it. **A.** The resected posterior wall of the sphenoid sinus included the bony sella, tuberculum sella and the planum sphenoidale to allow access to the suprasellar cyst. The cyst is the white structure posterior and inferior to the optic chiasm. **B.** The cyst is open and then drained. **C.** The cyst has been removed showing the third ventricle and optic chiasm above

Rare Cause of Trigeminal Neuralgia: Meckel's Cave Meningocele³

Trigeminal neuralgia presenting as a meningocele (blue arrow) in Meckel's cave with a CSF leak at the petrous apex. Black arrow represents trigeminal nerve root in



Reconstruction of CSF leak at petrous apex:

(A) fat graft followed by (B) alloderm with bone graft placed as a gasket seal. This is covered by a left nasoseptal vascularized flap (C).

³ Rare cause of trigeminal neuralgia: Meckel's cave meningocele. Alobaid,A; Schaeffer,T; Virojanapa,J; Dehdashti, Amir; *Acta Neurochirurgica* July 2015, Volume 157, pp1183-86

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Dr. Dehdashti is an internationally renowned neurosurgeon who trained in Switzerland, Canada and the United States. He is fellowship trained in neurovascular and endoscopic skull base surgery. His special interests are the expanded endoscopic endonasal techniques. He is Director of Cerebrovascular Neurosurgery Research at Cushing Neuroscience Institute and Associate Professor of Neurosurgery



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