



Endoscopic Transorbital Anterior Clinoidectomy For Anterior Clinoid Process Mucocele

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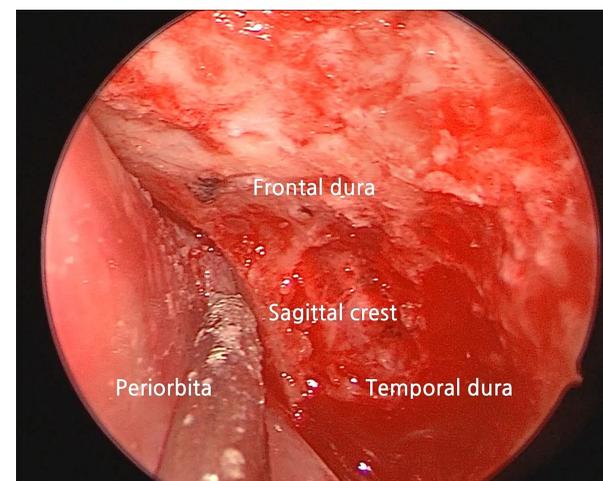
Abstract

Anterior clinoid process (ACP) mucocele is a rare lesion, typically managed via craniotomy or endonasal surgery. Here, we report a case successfully treated with **endoscopic transorbital surgery with anterior clinoidectomy**. This minimally invasive route provided direct access to the lesion with excellent visualization, while avoiding morbidity associated with conventional approaches. Our experience suggests that the transorbital approach represents a safe and effective alternative for ACP mucoceles.

Step 2: Landmark Identification

Key Landmark: The foramen of the recurrent meningeal artery was identified to locate the superior orbital fissure (SOF).

After drilling out of greater and lesser wings, we can identify temporal dura, frontal dura, periorbita and sagittal crest among them.



Case Presentation

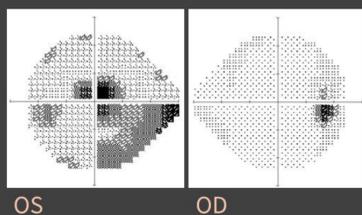
Clinical Presentation

The patient was in his early 50s

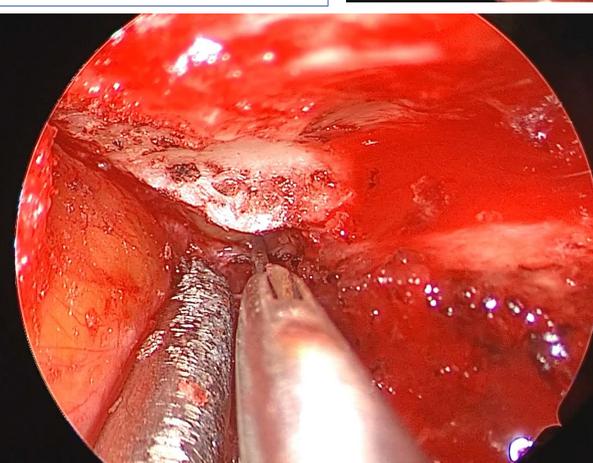
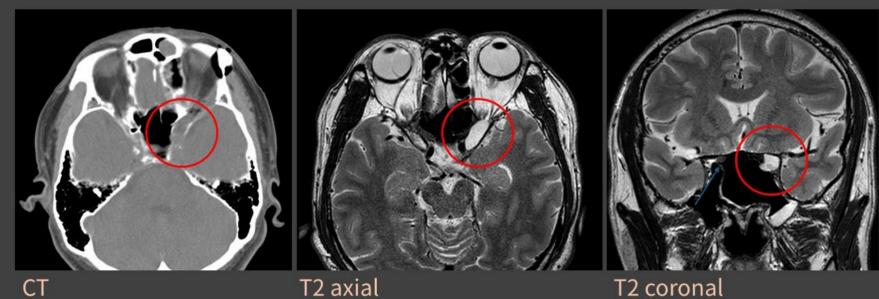
He presented with a sudden onset of visual impairment with central scotoma in the Lt. eye and orbital pain

Neurological examination:
Finger count (50cm)

Visual examination:
VA: Rt. 1.0
Lt. 0.1
Compressive neuropathy, Lt.



Preoperative Imaging



Step 3: identifying meningo-orbital band and extradural dissection

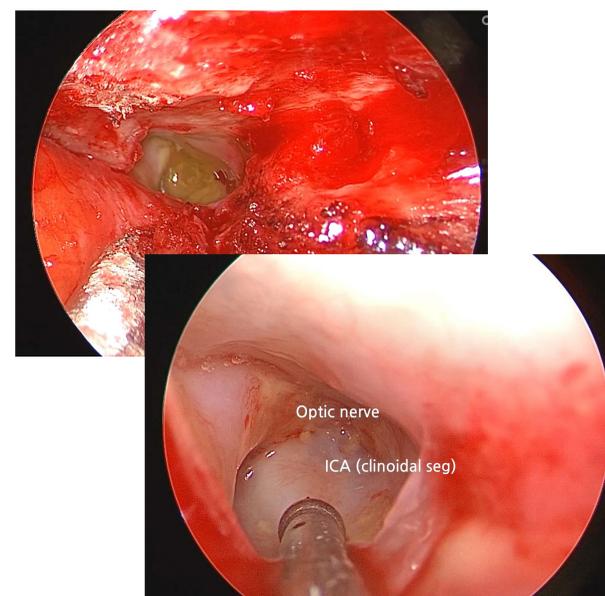
After removal of sagittal crest, the meningo-orbital band was incised at low power.

Step 4: Clinoidectomy
The ACP, already unstable due to erosion, was circumferentially dissected and removed.

Step 5: Decompression of mucocele

The mucocele was widely exposed and decompressed using suction.

We can inspect the route of optic nerve and clinoidal segment of ICA inside the mucocele



Surgical Video Presentation



Step 1: Sub-eyebrow incision and initial dissection

A sub-eyebrow incision was made, followed by periosteal incision along the orbital rim. The periorbita was carefully dissected from the lateral orbital wall.

Conclusion

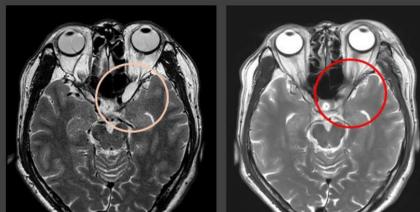
Transorbital approach for ACP mucocele is safe, effective and cosmetically acceptable

Outcome

Vision was improved after surgery

He was discharged at POD#2

Subtle scar at 6 months



Preoperative Postoperative



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