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Occipital Neuralgia as a Complication after Endoscopic Endonasal Resection of Anterior Skull Base Meningioma: A Case Report

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INTRODUCTION

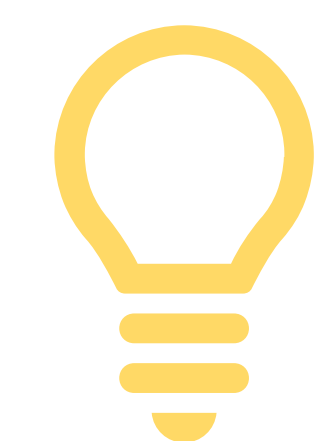
In a case series of 800 patients with this procedure, complications such as cerebrospinal fluid leak, meningitis, and neurological deficits have been reported. We report a patient with occipital neuralgia who was initially referred to our clinic for orthostatic headache, a complication not reported prior in the case series.

METHODOLOGY

Written informed consent was obtained from the patient for publication of this case report. All identifying information has been removed. This report did not require approval from the University Health Network Research Ethics Board (UHN REB), as single-patient case reports are considered exempt from review under institutional policy.

CASE REPORT

A 48-year-old female underwent a 10-hour endoscopic endonasal resection of an anterior skull base meningioma. The procedure was performed with the patient in the supine position, with slight head extension. Her immediate postoperative course was complicated by a cerebrospinal fluid (CSF) leak and presumed meningitis, necessitating reoperation and resulting in a prolonged 26-day hospital stay.



On the day of consult:
Occipital pain: associated with tingling and a sense of heaviness, aggravated by sitting or standing, and relieved when lying down, raising initial concern for SIH, particularly given her prior CSF leak history.

Occipital neuralgia was suspected and treated with a bilateral greater occipital nerve block using ultrasound-guided local anesthetic and corticosteroid injection. At two- and five-week follow-ups, the patient reported 90–100% symptom relief, confirming both diagnosis and therapeutic effectiveness.

We hypothesize that the surgical positioning and extended duration (10 hours) likely contributed to mechanical stress or compression of the occipital nerves, which may be an underrecognized complication.

To the author's knowledge, *this case report represents the first documented case of occipital neuralgia as a complication of endoscopic endonasal resection of an anterior skull base meningioma.* Occipital neuralgia can occur idiopathically or as a secondary condition, resulting from trauma, infection, neoplasm, or iatrogenic causes such as surgical intervention. Despite its clinical relevance, postoperative occipital neuralgia remains underrecognized, particularly in the context of skull base surgery.

TIMELINE OF TREATMENT

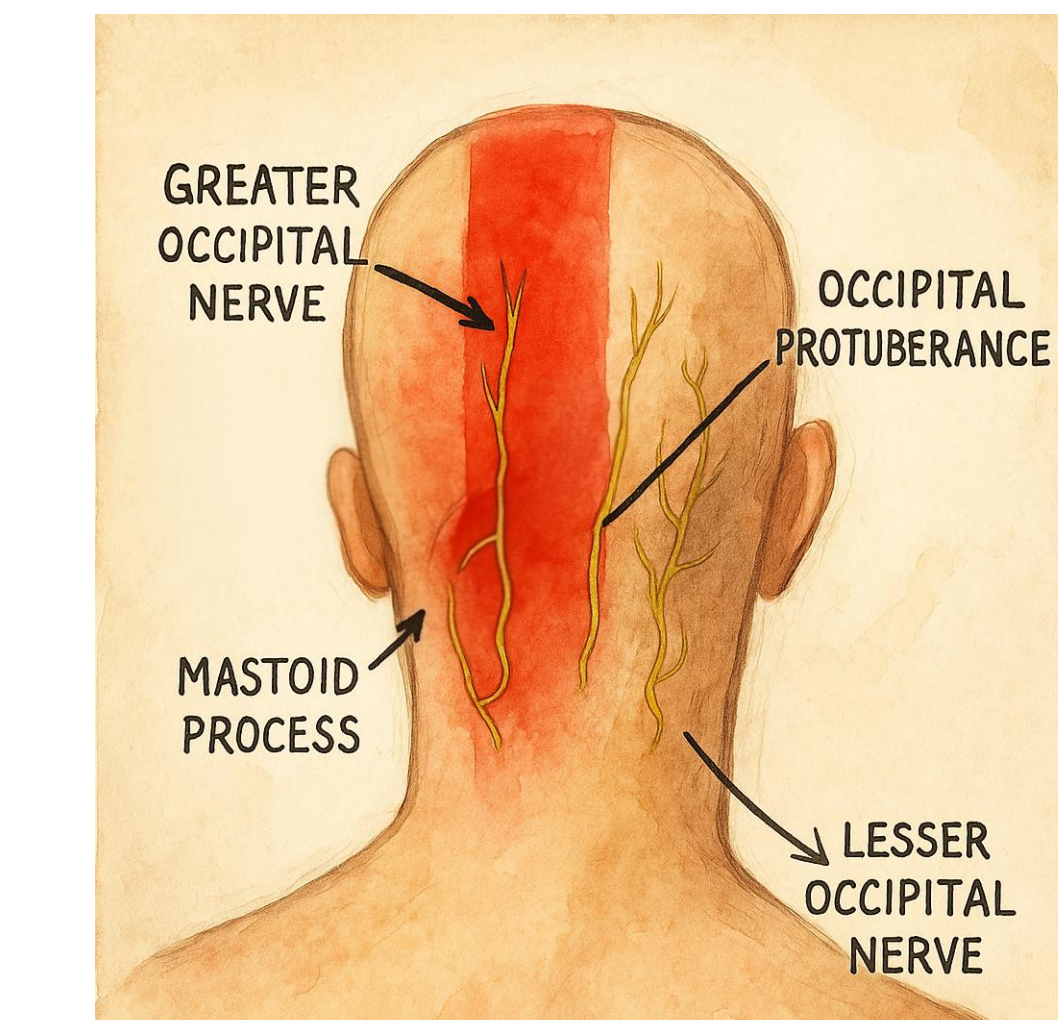


Figure 1. Possible compression of the Occipital Nerves during prolonged procedure



Figure 2. Position during endoscopic endonasal resection of skull base tumor: Supine with head extension

REFERENCES

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