

## A CASE OF ISOLATED SPHENOID SINUS POLYP: A RARE ENTITY

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**ABSTRACT**

Nasal polyps are polypoidal mass that arise from the mucous membrane of nose and paranasal sinus. Nasal polyps are of two types: Ethmoidal and Antrochoanal. Isolated sphenoid sinus is a rare clinical situation, most commonly associated with headache not resolving with medications. We report a case of isolated sphenoid sinus polyp presenting with headache and nasal obstruction not resolving with medication and nasal spray. Diagnostic nasal endoscopic findings revealed mild deviated nasal septum towards the right and mucoid discharge present in the left middle meatus. CT scan findings were suggestive of non enhancing hyperdense content with peripheral hypodense rim of mucosal thickening in the left sphenoid sinus and blockage of sphenoethmoidal recess. Patient underwent functional endoscopic sinus surgery for the same in which isolated sphenoid polyp from sphenoid sinus was present with allergic mucin. This paper emphasise the need for consideration of sphenoid sinus polyp as differential diagnosis of headache.

**KEYWORDS :** nasal polyp, sphenoid sinus, headache

**INTRODUCTION**

Nasal polyps are polypoidal mass that arise from the mucous membrane of nose and paranasal sinus. Nasal polyps are of two types: Ethmoidal and Antrochoanal. Isolated sphenoid sinus polyp is a rare clinical situation, most commonly associated with headache not resolving with medications. They are most frequent in adolescents and adults. Surgical treatment with complete excision of the polyp is important to avoid recurrences. Sphenoid sinus has many important relations to it like the optic nerve and internal carotid artery therefore great care has to be taken to avoid any complications.

**Case Description**

A 32 year old male patient presented to our tertiary hospital with chief complaints of left sided frontal headache and nasal blockage (left more than right ) and associated with left side facial pain for 4 years.

Patient also complained of repeated attacks of sneezing and upper respiratory tract infection.

There was no history of nasal discharge, nasal bleeding or altered smell sensation.

On local examination, in endoscopic finding there was mild deviated nasal septum towards the right and mucoid discharge present in the left middle meatus. There was no paranasal sinus tenderness.

Patient was advised CT scan of paranasal sinuses which was suggestive of non enhancing hyperdense content with peripheral hypodense rim of mucosal thickening in the left sphenoid sinus and blockage of sphenoethmoidal recess suggestive of sphenoid sinusitis with polypoidal findings. There was no evidence of bony remodelling changes.

Patient was advised to undergo functional endoscopic sinus surgery on the basis of local examination and CT scan findings.

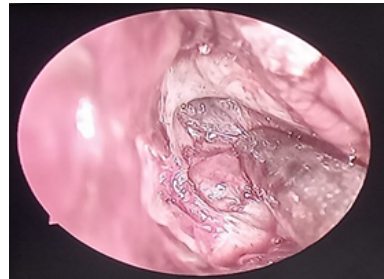
Patient was prepared for surgery with general anaesthetic fitness and consent for the surgery was taken and patient was posted for the surgery.

In Intraoperative findings, there was polyp coming from left

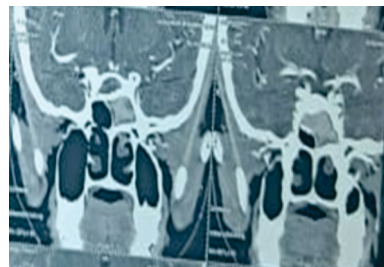
sphenoid sinus which was removed and sent for histopathological report and also there was allergic mucin present in the sphenoid sinus.

All the other sinuses were clear of any pathology. Patient was advised antibiotics and steroid nasal spray with nasal douching postoperatively.

The patients complaints were relieved postoperatively. On histopathological report, there was fungal sinusitis with sphenoid polyp.



**Figure 1-** Intraoperative Finding Showing Polyp



**Figure 2-** CT Scan showing hypodense content in the left sphenoid sinus

**DISCUSSION**

Sphenochoanal polyp is a rare clinical finding, which commonly presents with headache not resolving with medications. It usually presents in adolescent and young adults. They differ from ethmoidal polyps as they are bilateral and usually associated with infective etiology while sphenoid polyps are usually unilateral and associated with allergic etiology. CT PNS helps in localization of the polyp and also helps in knowing any anatomical variation preoperatively, as

sphenoid sinus has important relations with optic nerve and internal carotid artery. Functional endoscopic sinus surgery helps in relieving the symptoms. Recurrence is less common in sphenoid sinus polyps.

### CONCLUSION

Chronic unilateral headache associated with nasal obstruction not resolving with medications can be due to sphenoidal polyp. The symptoms of sphenoidal polyps are non specific. Most common presentation being headache and nasal obstruction. On endoscopic finding as polyp can be misdiagnosed as antrochoanal polyp. This being a rare clinical condition and can be identified from other polyps through CT PNS. Functional endoscopic sinus surgery is the treatment option which helps in relieving the symptoms.

**Funding:** No funding sources

**Conflict of interest:** None declared

**Ethical approval:** Not required

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