

## Isolated sphenchoanal polyp - A rare case report

Palukuri S. \*, Dhulipalla S.

Department of ENT, Katuri Medical College and Hospital, Guntur, India

**Correspondence Address:** \* Suresh Palukuri, Flat No-302, Sri Sai Santhoshini Nilayam, Near Balakutir School, 2/17 Brodiepet, Guntur, Andhra Pradesh, India.

### Abstract

Choanal polyps are solitary benign tumours which come from one of the paranasal sinuses. Isolated polyp originating from the anterior wall of the sphenoid sinus or from its interior and extending as choanal polyps into the nasopharynx are extremely rare. We report a case of 17 year old female presenting with progressive unilateral nasal obstruction, intermittent nasal discharge and headache. The diagnosis of sphenchoanal polyp was made by endoscopy and confirmed by CT scan paranasal sinuses. It was removed endoscopically via transnasal sphenoidotomy.

**Keywords:** Choanal polyp, Sphenoid sinus, Nasal endoscopy, Endoscopic sinus surgery

### Introduction

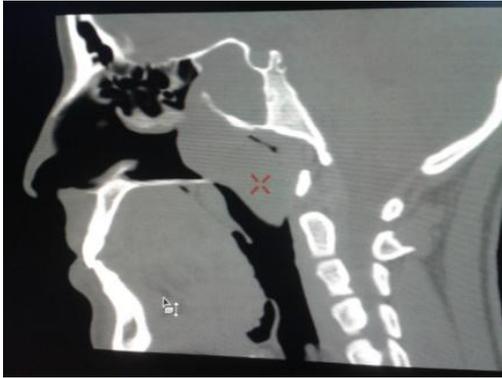
Choanal polyps are solitary, benign tumours which come from one of the paranasal sinuses and pass over drainage ostium of this sinus projecting itself to the choana upto the nasopharynx<sup>(3)</sup>. Isolated sphenchoanal polyp is rare that arise from sphenoid sinus exits through sphenoid ostium, pass across the sphenoid recess and reaches into the choana often mistaken for its most common counterpart antrochoanal polyp<sup>(5)</sup>.

The symptoms are essentially due to anatomical location of the sinus and its proximity to the intra cranial and orbital contents to which infections may spread. Nasal endoscopy serves as a primary diagnostic tool while CT &/or MRI useful for confirmatory diagnosis. Endoscopy assisted dissection is the most effective treatment for sphenchoanal polyp.

### Case report

A 17 year old female presented with history of unilateral progressive left side nasal obstruction and unilateral intermittent nasal discharge since 2 years and history of headache since 2 months. Anterior rhinoscopy showed a solitary smooth glistening pale polypoidal mass occluding the whole posterior part of nasal cavity. Posterior rhinoscopy revealed a whitish mass filling up the choana and nasopharynx. On diagnostic nasal endoscopy the polyp was seen arising from medial to middle turbinate from middle meatus. CT scan paranasal sinuses on contiguous axial sections showed soft tissue mass extending from sphenoid ostium into the sphenoid recess and rest of sinuses appear normal (Figure 1). So it is confirmed as sphenchoanal polyp. Routine preop investigations were done. Endoscopic sinus surgery was planned. During the procedure by tracing the polyp proximally we were

able to confirm its exit through the left sphenoid ostium. Sphenoid ostium was enlarged. The polyp was delivered into the transorally and sent for histopathological examination (figure 2, 3). Histopathology confirmed as benign sinonasal inflammatory polyp.



**Figure 1**



**Figure 2**



**Figure 3**

## Discussion

A choanal polyp is an isolated solitary sinus mass or cyst which has passed through the sinus ostium and protruded into the boundaries between the nasal cavity, nasopharynx and choana<sup>(1)</sup>. Two well recognised forms occur. The common antrochoanal polyp and the rare sphenchoanal polyp. Isolated polyp originating from anterior wall of sphenoid or from its interior and extending into nasopharynx is extremely rare. Sphenchoanal polyp is reported to occur in adolescence or early adulthood with equal male and female distribution.

Sphenchoanal polyp may have a variety of anatomical origins most of them arise in sphenoid ostium and some are reported to originate in adjacent areas<sup>(4)</sup>. They often present similarly to antrochoanal polyp and pathogenesis of both has also often been assumed to be the same. Crampette et al had a case of sphenchoanal polyp that was histologically similar to antrochoanal polyp<sup>(2)</sup>. In our case it was confirmed as inflammatory polyp.

Nasal endoscopy provides a clear view of the sphenoid recess and post nasal space. Diagnosis can be made by identifying the sinus ostium for which the stalk of the polyp pass through, in our case it was from the sphenoid ostium and the polyp is seen between the middle turbinate and septum, middle meatus is clear. CT or MRI imaging is an ideal method for demonstration of choanal polyp. It reveals soft tissue mass extending from the corresponding sinus ostium.

The choice of operating techniques in patients with sphenoid sinus disease depends on the extension of the disease. The endoscopic approaches to sphenoid sinus include transnasal, transethmoidal, transeptal and the endoscopic pterygoid fossa. Endoscopic transnasal sphenoidotomy with or without partial middle turbinectomy and with or without ethmoidectomy is considered most appropriate.

**Conclusion**

We report a rare case of isolated sphenochonal polyp. Diagnostic nasal endoscopy and CT scan paranasal sinus are helpful in diagnosis. Endoscopic transnasal sphenoidotomy is considered most appropriate surgery.

**References**

1. Batsakis JG, Sneige N. (1992). choanal and angiomatous polyps of the sinonasal tract. *AnnOtolRhinolLaryngol* 101:623-625.
2. Crampette L, Mondain M, Rombaux P. Sphenochonal polyp in children.

Diagnosis and treatment. *Rhinology* 1995;33:43-45.

3. De Jesus EPF, GotoEY, Marono SAM, etal. Sphenochonal polyp-case report and literature review. *Int Arch Otorhinolaryngol*2005;9(4):oct/Dec(8<sup>0</sup>).
4. Sethi DS, Lau DP, Chee LW, Chong V. Isolated sphenothmoidal recess polyps. *J Laryngol Otol* 1998;112:660-63.
5. Soh KBK, Tan KK. Sphenochonoal polyps in Singapore: diagnosis and current management. *Singapore Med J* 2000;41:1848-87.