

CASE REPORT

SPHENOCHOANAL POLYP: A CASE STUDY

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ABSTRACT: Sphenchoanal polyp is a rare clinical occurrence as compared to the much common antro-choanal polyp. It originates from the sphenoid sinus and extends into the choana via the sphenoid ostium. We present a case of sphenchoanal polyp and its clinical features and surgical management is discussed. Our aim in this case was to properly delineate the origin of the polyp and differentiate it from other lesions such as the antro-choanal polyp and meningocele, followed by meticulous endoscopic excision of the polyp.

KEYWORDS: nasal polyp, sphenchoanal polyp.

INTRODUCTION: Sphenchoanal polyp is a benign solitary mass arising from the sphenoid sinus. It exits through the sphenoid ostium and passes across the sphenothmoidal recess and reaches the choana. Thus it has three components the intra sinus, ostial and extra sinus part. The patient mostly presents with a nasal obstruction with or without a headache. On anterior rhinoscopy polyp may be seen in the nasal cavity but details regarding the origin of the polyp can only be confirmed with computerized tomography of the paranasal sinuses and endoscopic nasal examination. The treatment includes endoscopic excision and enlargement of the sphenoid ostium. In this paper we have highlighted the salient features of sphenchoanal polyp and its diagnosis and treatment is discussed.

CASE REPORT: A 12 year old boy presented to our ENT outpatient department with left sided nasal obstruction and rhinorrhoea. The patient was apparently alright 2 years back when he noticed a gradually worsening left sided nasal obstruction. The obstruction was persistent without any aggravating and relieving factors. There was no history of any epistaxis, diminished vision and reduced or altered smell perception. On examination the external nose was normal. On anterior rhinoscopy there was a single polyp seen in the left nostril surrounded by mucopurulent discharge, the polyp was insensitive and did not bleed on touch. Rigid endoscopy showed a thin pale pink stalk arising medial to the middle turbinate from the sphenoid ostium. Computed Tomography of the paranasal sinuses showed a well-defined homogenous opacity in the left sphenoid sinus and choana with minimal soft tissue shadow in the maxillary antrum and all other sinuses were clear. We planned an endoscopic excision of the polyp under general anaesthesia. The stalk of the polyp arising from the sphenoid sinus was excised and the entire polyp was delivered in toto through the oral cavity. The sphenoid ostium was widened and the sphenoid cavity on examination was clear without any remnants and any signs of bony erosion. The maxillary sinus ostium was also widened in the end and inspissated mucosal secretions from the sinus were cleared. Intranasal packing was done, pack was removed after 24 hours and the patient was discharged from the hospital. The postoperative histo-pathological examination of the

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specimen showed an inflammatory polyp without any signs of malignancy. On follow up the patient did not have any nasal complaints and was free of any recurrence.

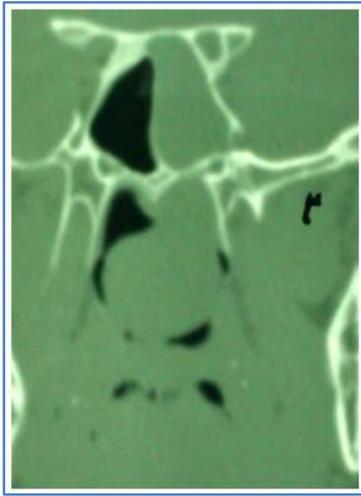


Fig. 1: CT PNS showing isolated sphenchoanal polyp



Fig. 2: Specimen of sphenchoanal polyp

DISCUSSION: Choanal polyps comprise about 3-6% of all nasal polyps¹. They are of three types the antrochoanal, sphenchoanal and ethmoidochoanal polyps. Of these the antrochoanal is the most common variety and the other two are of much rare occurrence. The ethmoidochoanal polyps are more difficult to determine because of the absence of a discrete ostia in ethmoid sinus unlike that of maxillary and sphenoid sinuses.² Choanal polyps have not reported to origin from the frontal sinus.³

Etiology of this choanal polyps still remains uncertain, earlier attempts to link it with IgE mediated allergic disorders does not hold true. It is suggested that choanal polyps arise from a precursor intramural cyst in the antrum or in the sphenoid sinus. Berg demonstrated similarities between the sinus component of the polyp and intramural cysts.⁴

Sphenchoanal polyps are extremely rare and can be easily misdiagnosed as an antrochoanal polyp, as both these lesions have the same sex distribution and age distribution i.e. below 40 years. They also present with a similar clinical presentation of progressive unilateral nasal obstruction. The best way to distinguish them is by computed tomography or magnetic resonance imaging of the paranasal sinuses. Diagnostic difficulty arises when both lesions coexist or when there is an associated maxillary sinusitis in a case of sphenchoanal polyp or sphenoid sinusitis in a case of antrochoanal polyp. This can be resolved in one of the following ways. Firstly, the sphenchoanal polyp passes medial to the middle turbinate whereas the antrochoanal polyp passes lateral to the middle turbinate. Secondly in case of sphenchoanal polyp there will be associated sphenoid ostium dilatation and in antrochoanal polyp there will be maxillary sinus dilatation.⁵

Other differential diagnosis such as a meningocele, meningoencephalocele, a long standing foreign body of nose or even a much rare occurrence such as a Thornwaldt's cyst needs

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to be ruled out in such cases. A meningocele or meningoencephalocele will mostly be associated with cerebrospinal fluid leak and a CT or MRI imaging of paranasal sinuses will reveal a mass in continuity with the intracranium. A foreign body of nose will be associated with a characteristic foul smelling discharge from the nose whereas a Thornwaldt's cyst commonly presents with a triad of post nasal discharge, halitosis and obstinate occipital headache. The diagnosis can further be confirmed with the help of endoscopy and imaging techniques.

The management of sphenchoanal polyp is surgical. It includes endoscopic excision of the polyp and widening of the sphenoid ostium. Endoscopic technique helps in complete removal of the polyp from the sphenoid sinus through the widened sphenoid ostium. The enlargement of the sinus has to be taken in a medial and inferior direction. This helps in better intra and postoperative visualisation of the sphenoid sinus.

Endoscopic technique with a microdebrider proves ideal in the management of such cases allowing gradual debulking of the polyp.⁶

CONCLUSION: Sphenchoanal polyp is a rare occurrence and needs to be properly distinguished from its more common counterpart, the antrochoanal polyp. A wrong diagnosis may lead to unnecessary exploration of the maxillary sinus and inadequate treatment of the sphenoid sinus thus leading to persistence and recurrence of the disease.

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