



Case Report

Sphenchoanal Polyp: A Rare Case Report

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Abstract

Sphenchoanal polyp are rare tumor arising from the sphenoid sinus and presents at the choana .Its main presenting symptom is progressive nasal obstruction. It is imperative to differentiate Sphenchoanal polyp from antrochoanal polyp for its complete clearance and prevent other sinuses from intervention¹. We present a case of sphenchoanal polyp and its clinical features and surgical management is discussed. Objective in this case was to properly delineate the origin of the polyp and differentiate it from other lesions by CT scan and MRI confirmed by nasal endoscopy, followed by meticulous endoscopic excision of the polyp. We present this case to highlight the rarity of these polyp and careful evaluation needed before any polyp surgery.

Keywords: Nasal polyp, Sphenchoanal polyp, Sphenoid sinus.

Introduction

Choanal polyp represents 3-6% of nasal polyps. Antrochoanal polyp is accepted as the main cause. Sphenchoanal polyp¹ is a rare benign solitary mass arising from the sphenoid sinus coming in picture because of increased use of endoscopes. Isolated polyps are originating from the anterior wall of the sphenoid sinus or from its interior and extending as choanal polyp into the nasopharynx are extremely rare. They present an intrasinus portion, an ostial one, and another extrasinus. They can come from maxillary sinus, sphenoid and ethmoid. The patient mostly presents with a nasal obstruction .Anterior rhinoscopy shows polyp in the nasal cavity but details regarding the origin of the polyp can only be confirmed with computerized tomography² of the paranasal

sinuses and endoscopic nasal examination. The treatment of sphenchoanal polyp includes endoscopic excision and enlargement of the sphenoid ostium. The target of this study is to present the case of a patient with progressive nasal obstruction complaints at right side. Its disgnostic investigation showed a large sphenchoanal polyp, which was completely removed through nasal endoscopy approach. Correct diagnosis of these polyp is often missed due to its non specific signs and symptoms.

Case Report

A 17 year old male presented to our ENT outpatient department with right sided nasal obstruction and rhinorrhea. The patient was apparently alright 2 years back when she started

noticing an insidious onset gradually progressive right sided nasal obstruction. It was associated with difficulty in breathing, sneezing, headache and rhinorrhoea. He denied having otalgia, dysphagia, allergy and epistaxis symptoms. On examination the external nose was normal. Anterior rhinoscopy showed a fleshy polyp in the right nostril covered by mucopurulent discharge, the polyp was insensitive and did not bleed on touch. Rigid endoscopy showed it to be arising medial to the middle turbinate from the sphenoid ostium.

Computed tomography scan fig 2,3 shows there was uniform opacity in right sphenoid sinus and in right side of nasal cavity. Axial cuts showed uniform opacity in right sphenoid sinus, and hiding totally occupying nasopharynx and oropharynx. Natural sphenoid ostium was not seen. As there were no signs of involvement of other sinuses the likely diagnosis was sphenchoanal polyp in right nasal cavity.

Functional endoscopic sinus surgery of polyp under general anesthesia was planned. The polyp of about 5*3*2.5cm was excised and delivered in toto from its stalk arising in sphenoid sinus through oral cavity. The sphenoid ostium was widened and the sphenoid cavity on examination was clear. Intranasal packing was done, pack was removed after 24 hours and the patient was discharged from the hospital. During follow-up of one, two, three and six months, there was no sign of recurrence and patient had no further complaints.



Fig1.Specimen of sphenchoanal polyp



Fig 2 CT scan showing isolated sphenchoanal polyp.

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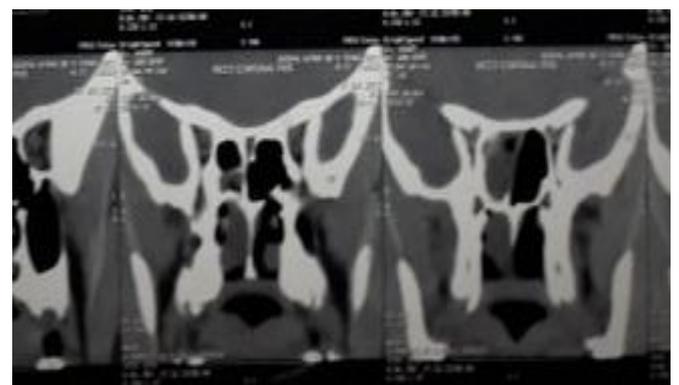


Fig 3 CT scan showing isolated sphenchoanal polyp.

Discussion

Antrochoanal polyp is most common polyp out of sphenchoanal and ethmoidal polyp which are of much rare occurrence. Sphenchoanal polyp is

one of the choanal polyp. There are other two forms of choanal polyps are antrochoanal polyp and ethmoidchoanal the later one being very rare³. No polyp have been reported to be originated from frontal sinuses. Sphenchoanal polyps being rare, and are therefore more likely to be missed on diagnosis. Its main differential diagnosis is with antrochoanal polyp, as they are clinical and histologically indistinctive⁴. Depending on location both present as unilateral nasal obstruction, facial pain and rhinorrhea, due to nasal cavity occupation and involvement of ostiomeatal complex. These polyp cannot be differentiated based on endoscopy and biopsy. Both types of choanal polyp have an equal sex distribution. Mostly presents as unilateral nasal obstruction with associated symptoms almost being the same such as rinorrhoea, headache, sneezing, snoring and eustachian tube defect leading to ear problems like otalgia and otitis media⁵. Both the choanal polyp is similar on histology. They are formed by a cystic center surrounded by oedema stroma represents presence of inflammatory cells. Its surface is covered by respiratory epithelium where areas of metaplasia. Antrochoanal polyp from a sphenchoanal polyp is best differentiated with the use of computed tomography or magnetic resonance imaging of the paranasal sinuses⁶. Etiology⁷ 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 sinus⁸. All reported cases of sphenchoanal polyps have been solitary polyps. The distinction between antrochoanal and sphenchoanal polyps is very important both to avoid unnecessary manipulation of paranasal sinus not involved. The management of sphenchoanal polyp is surgical⁹. Polyp is excised with endoscopic excision through the widened ostium of sphenoid sinus. 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.¹⁰

Conclusion

Sphenchoanal polyp is of rare occurrence and its diagnosis is often missed due to its clinical and histological resemblance with other sinonasal polyps. Proper approach to these cases prevents from wrong diagnosis and unnecessary surgical intervention to other sinuses. Clinical features are almost similar to all the choanal polyps, diagnosis confirmed on computed tomography scan and magnetic resonance imaging. Now a days with meticulous use of nasal endoscopy, sphenchoanal polyp are now being diagnosed more and even earlier. Nasal endoscopic excision of polyp is the treatment of choice of sphenchoanal polyp.

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