

Case Report

Isolated sphenoid polyp: a cause of headache

J. R. Galagali¹, Roohie Singh^{2*}, Santosh Kumar³

¹Department of ENT and HNS, Base Hospital, Delhi, India

²Department of ENT, Military Hospital, Hisar, Haryana, India

³Department of Eye, Army Hospital (R&R), New Delhi, India

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*Correspondence:

Dr. Roohie Singh,

E-mail: roohiesingh@yahoo.in

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ABSTRACT

Isolated sphenoid sinus polyp is a rare clinical situation. It might be an incidental finding while investigating a case of headache. We report a case of 21 years old male who presented with history of headache since 6 months. Diagnostic nasal endoscopy (DNE) revealed a right nasal mass which was confirmed by computed tomography (CT) of paranasal sinuses (PNS). The patient underwent Functional endoscopic sinus surgery (FESS). This paper emphasizes importance of correct diagnosis and consideration of sphenoid sinus disease as differential diagnosis of patients with headache.

Keywords: Headache, Isolated, Polyp, Sphenoid

INTRODUCTION

Nasal polyps are edematous and hypertrophied mucosa of paranasal sinuses. Antrochoanal, ethmoid and sphenoid polyps arise from maxillary, ethmoid and sphenoid sinuses respectively.¹ Sphenoid polyp though rare is often confused with Antrochoanal polyp because both are single pedunculated and usually unilateral.² To differentiate between the two is important to avoid undue exploration of maxillary sinus and incomplete removal and recurrence of the polyp. However, with advent of DNE and CT PNS, the management of such cases has improved.³ Nasal mass in sphenoidal recess are often neoplastic. Also, the anatomy is complex. So, a good preoperative evaluation is important.⁴ This paper also highlights the fact that the clinician should consider sphenoid sinus pathology as a cause of headache.

CASE REPORT

A 21 years old male presented with history of frontal headache since 6 months. Associated complaints were

right sided nasal obstruction and intermittent mucoid nasal discharge. Other causes for headache were ruled out by physician and ophthalmologist. Anterior rhinoscopy revealed pale, glistening mass in right nasal cavity. DNE revealed polypoidal mass in right nasal cavity with stalk communicating with right sphenoid ostium through a pedicle (Figure 1). CT PNS confirmed the above findings (Figure 2). Hence, a diagnosis of isolated right sphenoid polyp was made. The patient underwent FESS. The polyp was delivered per nasal (Figure 3 and 4). Postoperative follow up showed improvement in headache which confirmed Sphenoid sinus polyp as main cause of headache in this case.

DISCUSSION

Nasal polyps may arise from maxillary, sphenoid or ethmoid sinuses. 4-6% of all nasal polyps are Antrochoanal polyps. Sphenoid polyps are extremely rare.¹ Sphenoid polyps arise from sphenoid ostium and area adjacent to sinus.³ In our case, it originated from sphenoid sinus.

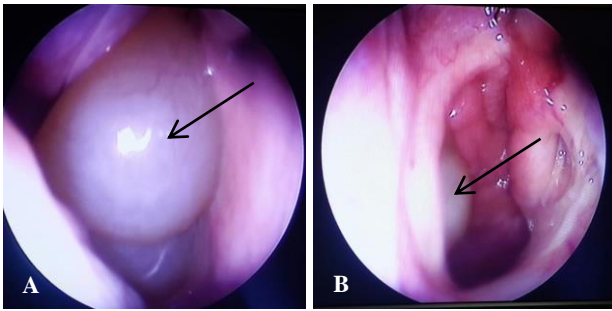


Figure 1: (A) Diagnostic nasal endoscopy showing right nasal polypoid mass, (B) polypoid mass in nasopharynx visible from left side (black arrow).



Figure 2: CT PNS axial (A) and coronal (B) view showing homogeneous opacity in right sphenoid sinus extending into nasopharynx.

Most common presenting symptom of isolated sphenoid sinus disease is headache which is atypical and unresponsive to analgesics and exacerbates by head movements.⁵ Nasal obstruction is the next most common presenting complaint.⁶ In our case, both the symptoms were present.

The sphenoidal recess has a complex anatomy and is relatively inaccessible clinically.³ The incidence of neoplastic mass is also common in this area. A CT or Magnetic resonance imaging (MRI) is invaluable tool for

making diagnosis and planning surgical approach. Intraoperative complications due to anatomical relation to Brain, meninges, optic nerve, internal carotid artery, cavernous sinus, Cranial nerves (oculomotor, trochlear, ophthalmic, maxillary branch of trigeminal nerve and abducens) is thus avoided.⁷

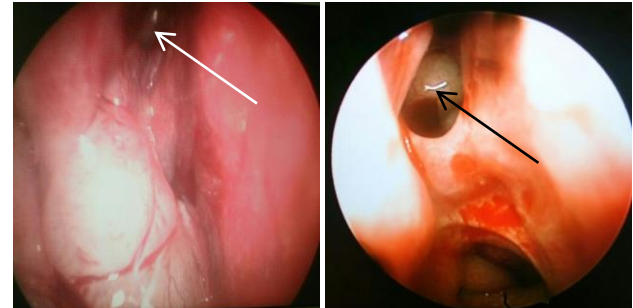


Figure 3: (A) Intraoperative endoscopic view of sphenoid polyp with stalk leading to sphenoid ostium (white arrow), (B) sphenoid ostium visible completely after removal of polyp (black arrow).



Figure 4: Removed polyp (larger pharyngeal part and small nasal part).

Management of nasal polyposis involves complete removal by FESS. It offers excellent intraoperative visualization of sinuses and completes removal of polyp. Hence, a lower recurrence rate.⁸ In cases of bulky large polyp microdebriders facilitates tracing the pedicle to the origin and helps complete removal.²

CONCLUSION

Isolated sphenoid polyposis is rare. DNE and CT PNS is investigation of choice. This case report intends to highlight the fact that an alert clinician should not wrongly diagnose sphenoid polyp as antrochoanal polyp. Also, in a case of headache, a differential diagnosis of isolated sphenoid sinus disease must also be considered.

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