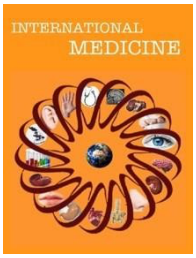

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Case Study

Exploring A Case of Giant Antrochoanal Polyp – A Surgical Case Report

Dr Avinash Kumar[1] , Dr Anamta Sayeed[2] , *Dr Garima Sinha[3], Dr Mansi Sharma[4]

[1]Associate Professor, Dept. of Otorhinolaryngology – Head and Neck Surgery, Saraswathi Institute of Medical Sciences (SIMS), Anwarpur ,Hapur, U.P.
[2]Senior Resident , Dept. of Otorhinolaryngology – Head and Neck Surgery, Saraswathi Institute of Medical Sciences (SIMS), Anwarpur ,Hapur, U.P.
[3]Assistant Professor, Dept. of Anaesthesia and Critical Care, Government Institute of Medical Sciences GIMS, Greater Noida , U.P.
[4]Assistant Professor, Dept. of Otorhinolaryngology – Head and Neck Surgery, Saraswathi Institute of Medical Sciences (SIMS), Anwarpur ,Hapur, U.P.

Corresponding Author: **Dr. Garima Sinha**

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Abstract

An Antro choanal polyp , also referred to as Killian's polyp, is a benign, solid, polypoid growth that arises from the inflamed mucosal lining of the maxillary sinus. It extends through the maxillary ostium into the nasal cavity, choana, and nasopharynx. It is relatively uncommon in adults. Hereby we present a case of 28 year old with a common problem with an unusual presentation.

Keywords: **Killians Polyp, Torsion, Angiomatous, Fess.**

INTRODUCTION

Antrochoanal polyps (ACP) originate from the mucosa of maxillary antrum and enlarge through the ethmoidal infundibulum or an accessory opening in the medial wall of the maxillary sinus into the nasal cavity and gradually prolapse towards nasopharynx.[1]

ACPs have been reported to account for 4–10 % of nasal polyps in the general population, but are more common in children and young adults, where they account for up to 33 % of nasal polyps.[2] Most common symptoms are unilateral nasal obstruction, rhinorrhoea, nasal bleeding, dyspnoea, dysphagia, obstructive sleep apnoea, nasal speech and even cachexia.[3]

Nasal endoscopy and paranasal sinus computed tomography (CT) are the gold standard tools for diagnosis based on observation of soft tissue in the maxillary sinus antrum without bony erosion, which may extend through the natural or accessory ostium to the nasal cavity to the choana.[4] Management consists of Total Endoscopic Removal of the polyp.

CASE REPORT

A 28 year old male patient presented to our outpatient department with complaints of Right Sided Nasal Obstruction Since Past 4 months. It was associated with mucoid nasal discharge with headache present in the frontotemporal region along with heaviness of the face. He had one episode of scanty nasal bleed on manipulation.

On examination, we noted a solitary mass in the right sided nasal cavity, extending upto the choana, with variable colour and consistency from pale pink polypoidal to deep red in colour and firm in consistency. The mass could be probed all around except laterally and was neither bleeding nor sensitive to touch.

On a contrast enhanced CT of the nose and the paranasal sinuses, we noted a well-defined, homogenous soft tissue lesion in right maxillary sinus extending through an enlarged ostium into right middle meatus continuing into right nasal cavity, posterior choana and reaching the nasopharynx. The mass caused thinning of the walls of the maxillary sinus with focal cortical attenuation. Nasal Biopsy of the mass was done under local anaesthesia which confirmed the diagnosis of an antrochoanal polyp.

The patient was then planned for a definite procedure of Right Endoscopic Medial Maxillectomy under General Anaesthesia. Initially the nasal and the nasopharyngeal part of the mass were removed. This was followed by removal of the medial wall of the maxillary sinus for complete extraction of the entire contents of the maxillary sinus. Complete disease clearance was done followed by nasal packing for a period of two days.

The removed specimen was then for histopathological diagnosis and was proven to be Antrochoanal Polyp with torsion.

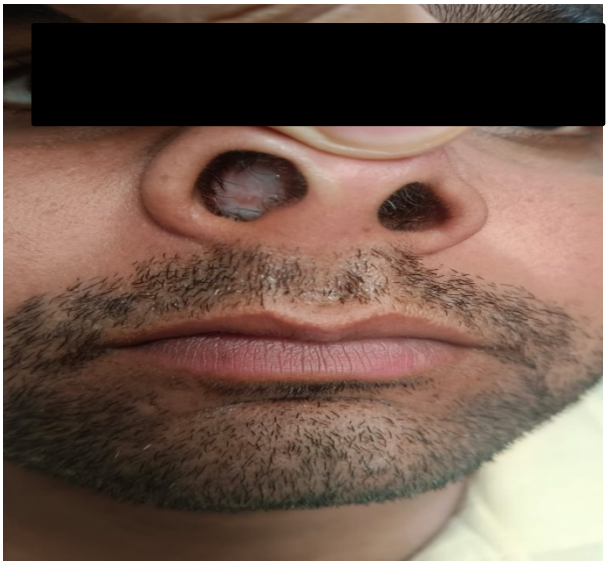

IMAGE 1 - Right Sided Nasal Mass Noted on Anterior Rhinoscopy

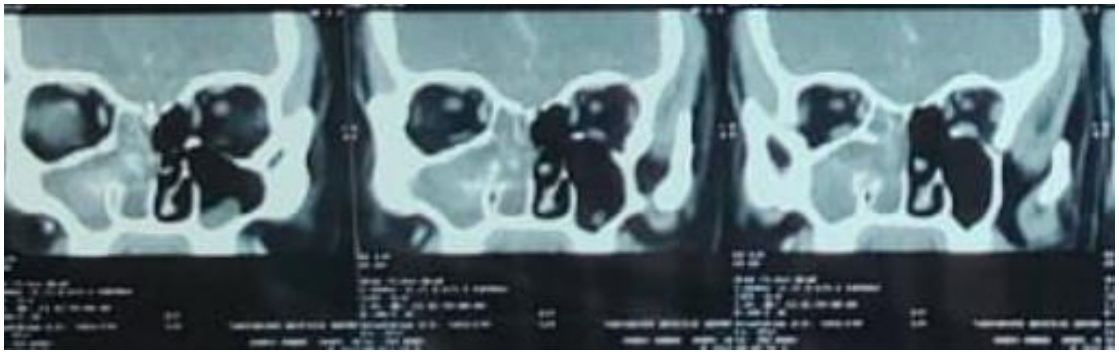

IMAGE 2 - CECT Nose and PNS showing the homogenous mass and its extent

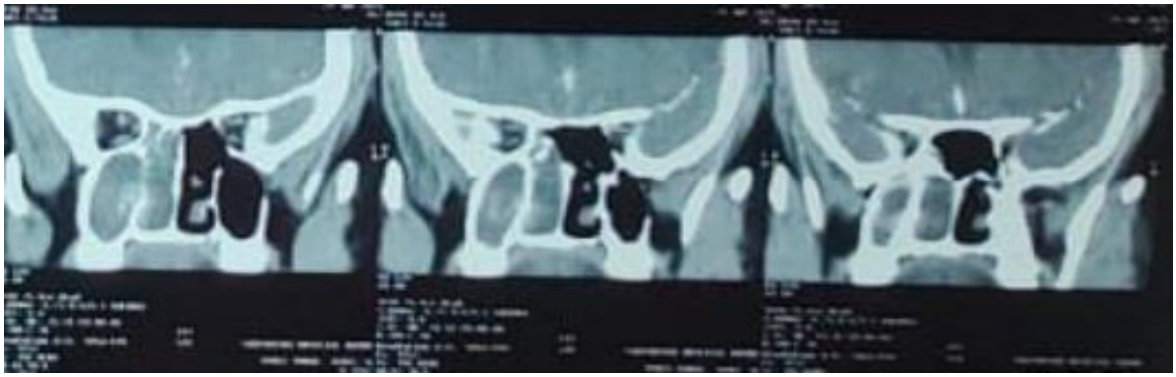

IMAGE 3 - CECT Nose and PNS showing the homogenous mass and its extent

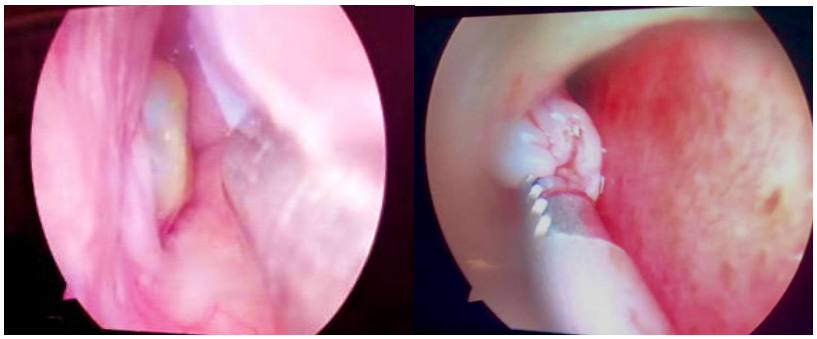

IMAGE 4 - Nasal Endoscopy showing the Polypoidal Mass

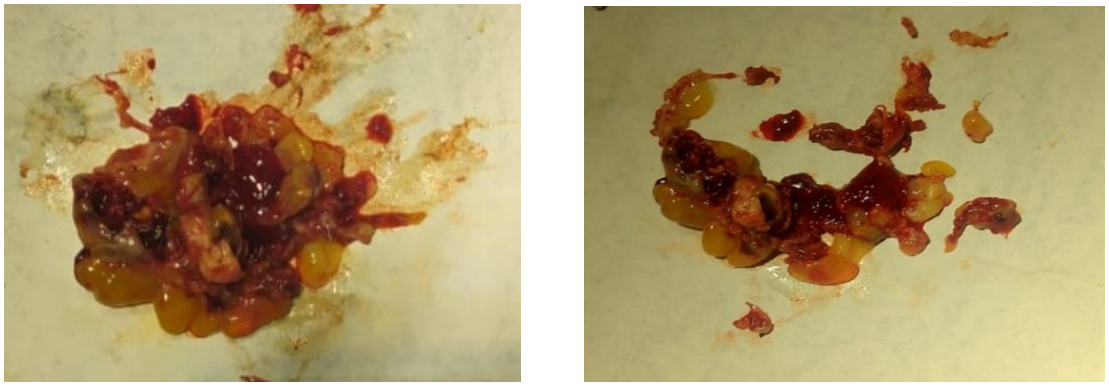

IMAGE 5 -Excised Specimen of the AC Polyp with haemorrhagic changes

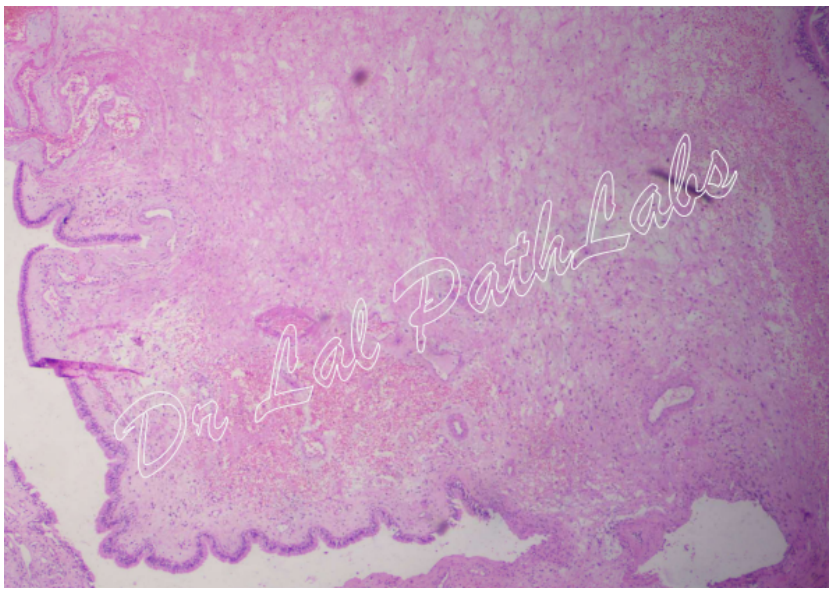

IMAGE 6 -Microphotograph showing Fragmented Congested Polypoidal Tissue with features of Torsion .No evidence of granuloma or malignancy.

DISCUSSION

Professor Gustav Killian first described this polyp in 1906, and an ACP is also referred to as Killian's polyp.[4] An antrochoanal polyp is a benign lesion originating from the oedematous mucosa of the maxillary sinus, growing through the main or accessory ostium which is usually enlarged into the middle meatus and protruding posteriorly to the choana and nasopharynx.[5] This kind of polyp usually occurs in isolation and is seen mainly in patients < 40 years of age and has a male predilection. Although their aetiology remains unknown, allergy and the presence of a sinonasal disease has been implicated . Further work is also needed to investigate the role of inflammatory mediators (histamine, IgE, adhesion molecules, Platelet Activating Factor, as well as metalloproteases and nasal remodelling, and tumour marker expression in antrochoanal polyps.[6] Common symptoms include nasal obstruction, nasal discharge, nasal bleeding. They can also cause headache, facial heaviness, loss of smell. Rare presentations include dysphonia, dysphagia, stridor, severe pain.

Giant Size polyps are also known to be associated with more severe and serious symptoms.

Pre operative assessment involves CT of Nose and PNS and Diagnostic Nasal Endoscopy.

The definitive treatment is its surgical removal. Caldwell-Luc procedure, polypectomy and Functional Endoscopic Sinus Surgery are some of the procedures performed.

CONCLUSION

Although nasal polyps are generally common and benign, antrochoanal polyps represent only about 4% to 6% of all cases. Functional endoscopic sinus surgery (FESS) remains the gold standard for their treatment. However, the presence of bone destruction, nasal bleeding, or cachexia due to large nasal masses may raise suspicion of a malignant tumor. Therefore, a thorough evaluation, including a physical examination and an endoscopic assessment, is essential. Our Case highlights the importance of combining multiple approaches at one time to perform complete resection and prevent recurrence and complications.

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