



CASE REPORT: UNUSUAL PRESENTATION OF NASAL POLYP

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ABSTRACT Nasal polyp is a pedunculated, soft, elongated structure attached to the nasal mucosa by a slim stalk or a broad base. A twenty two year old male with chief complaints of left nasal obstruction for three years with associated, decreased sense of smell. History of nasal discharge not foul smelling and not blood tinged. History of surgery to nose for similar complaint twice previously. On examination; Septum in midline. Irregular reddish mass occupying most of the nasal cavity, insensitive to touch & bleeds on touch. Thick mucopurulent discharge seen around the mass. Posterior Rhinoscopy shows mass in the choanal with thick discharge in the nasopharynx. Left Maxillary and ethmoid paranasal sinus tenderness elicited. DNE: Reddish granulomatous mass arising from lateral wall of nose mostly arising from inferior turbinate, floor is free. Discharge from the middle meatus. CT Scan of PNS shows large lobulated iso to hypodensity mass lesion seen occupying entire left nasal cavity and left maxillary sinus. Impression given was Sinonasal mass. Procedure done was Endoscopic excision of nasal mass and middle meatal antrostomy. Histopathological examination revealed Chronic Inflammatory polyp.

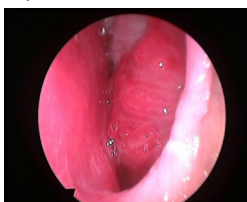
KEYWORDS : Nasal mass, inferior turbinate, chronic inflammatory polyp.

INTRODUCTION

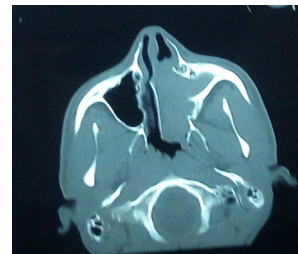
Nasal polyps represent the end stage local manifestation of chronic inflammatory disease of the sinonasal tract. Nasal polyps are best thought of as 'chronic rhinosinusitis with nasal polyps'^[1]. A nasal polyp is defined as edematous, pedunculated mucosa of the paranasal sinuses which has prolapsed into the nasal cavity. These polyps commonly arise around the openings of the paranasal sinuses^[2]. Ethmoidal polyp – Multiple, mostly bilateral, Allergy is most common etiology. Antrochonal polyp - Single, unilateral, Infectious is the most common etiology. In the normal population the prevalence is between 1 and 4% in adults and 0.1% in children. Nasal polyps are more common in males (2–4:1)^[1].

CASE REPORT

A 21 year old male came to ENT opd with a chief complaints of nasal obstruction on left side since 3 years which is insidious in onset, gradually progressive and persistent all the day. Associated with nasal discharge, post nasal drip, headache, change in voice and decreased sense of smell. No history of facial swelling, bleeding per nose. In past he underwent FESS twice before 11 & 7 years. He was symptom free for 4 years. On examination external nose normal, vestibule normal. Anterior rhinoscopy : Septum pushed to right side, Single smooth mass occupying the left nasal cavity, which is red in colour, not sensitive to touch, bleeds on touch, mucoid discharge present. Probe test: able to pass all around superiorly, inferiorly and medially except laterally. Posterior rhinoscopy: Mass seen in the left choana and mucoid discharge seen. Left maxillary and ethmoid tenderness elicited. Diagnostic nasal endoscopy revealed Left side: Thick mucoid sticky discharge seen, reddish granulomatous mass present, irregular margins, bleeds on touch, arising from the lateral wall of nose, mostly from the inferior turbinate and occupying the floor of the nasal cavity. Right side: Thick mucoid discharge is seen. CT PNS – large lobulated iso to hypodensity mass lesion seen occupying the entire left nasal cavity and left maxillary sinus.



Endoscopic image of the Left Nasal mass



CT Axial view



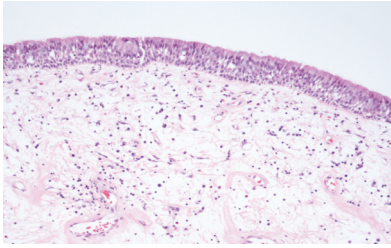
CT Coronal view

Differential Diagnosis:

Left recurrent antrochonal polyp, Left nasal mass, Inverted papilloma.

TREATMENT

Endoscopic excision of nasal mass under GA. Reddish mass is seen adherent to inferior turbinate. Sticky glue like secretions are sucked out from the mass. Bipolar cautery was used to separate the mass from inferior turbinate and a part of inferior turbinate is also removed. Horizontal part of uncinate process was taken out, Maxillary sinus opening further widened done. Mass was seen going into the maxillary sinus which was removed in toto. Maxillary sinus is hypoplastic and a septum is seen dividing the sinus into large anterolateral and small posteromedial segments. Tumor was seen involving the posteromedial segment. While removing nasal mass sphenopalatine artery got injured which was cauterized. Periosteum on inferior turbinate bone was elevated as a flap and haemostasis secured. Anterior ethmoidectomy done Nasal pack kept, which was removed after 48 hrs.



Histopathology image of inflammatory polyp

Discussion & Conclusion

While ethmoidal polyps are likely to be allergic in origin, polyp formation in other sinuses, particularly maxillary is unknown. Polyp formation and growth are activated and promoted by an integrated involvement of mucosal epithelium and inflammatory cells which in turn may be due to both infectious and noninfectious inflammation. In a large number of patients with nasal polyposis and on examination of autopsy specimens, it has been shown that nasal polyps are mainly situated in the middle meatus^[3]. They commonly arise from the mucous membrane of the ostia, clefts and recesses of the sinuses, namely the osteomeatal complex. In a study by Andrews AE, Bryson JM, Rowe-Jones JM, polyps were noted to be specifically originating from sites on the lateral nasal wall, such as the uncinate process, infundibulum, frontal recess and bulla ethmoidalis^[4]. The reason for this is unknown and it may be possible that the 'touching mucous membranes' in a narrow osteomeatal complex results in release of proinflammatory cytokines from epithelial cells. Another possibility is the dynamic of air currents and pressure in the nose. In the rare instance when a polyp arises from an unusual site, such as the nasal septum or, as in this case, the inferior turbinate, the cause is still less known^[5]. Based on the assumption that polyps arise almost always in proximity to an inflamed airway mucous membrane, it may be likely that preceding chronic inflammation has been the trigger for polyp formation.

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