PSEUDOTUMOUR NOSE

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Introduction

The nose and nasopharynx are fertile territories for formation of tumours. These may be true neoplasms or tumour like lesions i.e. nasal polyps etc. Here we report a very unusual nasal 'tumour' which presented as a fleshy mass and histopathologically was found to consist only of inspissated nasal secretions and inflammatory cells. The probable mechanism of formation of such 'masses' is discussed.

Case Report

A 6-year-old male patient presented to the ENT OPD with h/o bringing out an irregular fleshy mass, resembling a sloughed nasal polyp, preorally a few days earlier. The patient was asymptomatic except for history of nasal obstruction and snoring for a few days prior to expelling this unusual mass. There were no complaints of nasal obstruction, nasal discharge, epistaxis, headache or rhinolalia. There was no history of cough, hoarseness of voice, stridor, dysphagia, fever or gastroesophageal reflux. There were no aural complaints.

General physical examination was normal. Anterior rhinoscopy showed normal nasal mucosa with no congestion or discharge. Nasal airway was patent, paranasal sinuses were non tender and posterior rhinoscopy was normal. No polyp or any mass lesion was detected in the nose and posterior rhinoscopic examination of nasopharynx was normal. Throat examination did not show any postnasal drip and there was no velopharyngeal incompetence. Indirect laryngoscopy was normal with no congestion or discharge in the laryngopharynx and normal appearance of vocal cords. There was no hearing deficit and tympanic membranes were normal in appearance and mobility. Radiological examination of sinuses and nasopharynx was negative. Gross examination of the mass showed it to be of rubbery consistency soft and with irregular surface (Fig 1). Histopathological examination showed that this mass was composed of fragments of squamous epithelium, mucous, keratin and groups of neutrophil leucocytes. No structured foreign body masses were seen other than small groups of flattened cells, no viable histologically recognisable tissue was identified.

This mass was an enigma since such a lesion resembling only nasal secretions did not find any mention in standard literature. Because of the innocuous nature of the lesion and a negative clinical examination no treatment was offered to the patient.

However our interest was aroused and a thorough review of literature was undertaken which revealed only two cases where

such masses were reported in the laryngopharynx and were found to be inspissated secretions [1]. This set to rest our doubts whether nasal secretions alone could produce fleshy tumourous masses.

Discussion

Adequate saturation of water vapour of inspired air is essential to maintain integrity of ciliary epithelium. The moisture is supplied by transudation of fluid through the mucosa and by secretion of mucosal glands and goblet cells in nasal mucosa. The mucosal blanket forms a continuous protective covering over the nasal mucosa, it traps fine particles of dust, soot, pollens and bacteria and is in constant motion due to ciliary activity along fixed ciliary pathways.

The pathophysiology involved in formation of inspissated masses can only be speculated. These masses contain a number of different constituents with different physical and chemical properties i.e. mucous, keratin flattened epithelial cells and scattered inflammatory cells. Analogy similar to formation of intravascular thrombosis i.e. changes in pattern of blood flow, changes in constituents of blood, changes in intimal surface of vessels (Virchows triad) can be suggested

Fig. 1 : Showing nasal mass

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[2]. Any change in nasal airflow through post nasal space or damage to nasal epithelium may result in formation of mucosal masses. The physical properties of mucous may be altered by a process of inspissation involving the desiccation of mucous by the flow of air over it leading to increased viscosity [3].

Normally such material would be transported by the ciliary movement and eventually expelled through external nares or pass into the nasopharynx before reaching a clinically important size. Increased viscosity of mucous, damage or metaplasia of ciliated columnar epithelium, dehydration, exposure to hot climate, nasal

infections producing acidic pH and also excessive use of nasal decongestants reduce the efficiency of ciliary transport, hence it is likely that under any of these conditions large masses described here can be built up.

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