Tubercular Septal Abscess

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Abstract

Tuberculosis of nose has become so infrequent that it is virtually a forgotten disease entity among younger practitioners in this country. Nevertheless, it can occur in all segments of our population and may present a confusing diagnostic problem. A case is presented because of its rarity and more importantly as a reminder of the diagnosis since despite modern chemotherapy the incidence of this disease is once again increasing.

Introduction

Granulomatous lesions within the nasal cavity may represent either local diseases or a manifestation of a systemic disorder. In any of the situation differential diagnosis must include tuberculosis. Nasal involvement of this condition was first described in Venice by Giovanni Morgagni in 1761 but it was not until 1876 that primary nasal disease was described by Clarke in an address to the pathological society of London.²

Case Report

A 52 year old female presented to ENT/OPD with chief complaint of nasal blockage since one month, which was progressively increasing. There was no history of trauma, epistaxis, mucopurulent rhinorrhea, visual disturbance and pain over the face. She was diagnosed diabetic and hypothyroid three months back. She had supraclavicular lymph node biopsy, two months back. The histopathology of lymph node was tubercular and she was on Anti tubercular therapy since then. HRCT of chest was done at that time which showed mediastinal, bilateral hilar and left supraclavicular (Fig. 1) lymphadenopathy with subtle subpleural and peri bronchovascular nodules. Rest of the pleural space and bony cage were normal. On clinical examination there was swelling of the dorsum of the nose, anterior rhinoscopy showed bulge in the septum which was prominent on both the sides. Overlying mucoperichondrium was normal, no ulcer/erosion seen and postnasal space was apparently normal. CT scan of paranasal sinuses revealed septal bulging with breach in continuity of anterior end of septum (Fig. 2). Posterior part of septum was absolutely normal (Fig. 3). At the time of admission WBC count was 8.740, neutrophils 79% and ESR was 90 mm/hr. Incision and drainage was done under local anaesthesia in view of medical condition. I and D revealed minimal seropurulent discharge. The mucoperichondrium was thickened with lots of granulation tissue. Quadrangular cartilage was thinned out. Granulation tissue alongwith the cartilage were removed and sent for histopathological examination. Seropurulent discharge was sent for bacterial culture, sensitivity and fungal smear. Histopathology showed inflamed granulation tissue with Langhan's cell and necrosis, well defined granuloma was seen (Fig. 4). No definite vasculitis was seen. PAS and GMS stains were negative for fungal elements. Smear and culture was positive for Acid Fast Bacilli which confirmed the diagnosis as tubercular abscess. Fungal smear and culture sensitivity was negative. ANCA was also negative. Patient was continued with AKT and discharged. Continuous follow up was done upto one year and patient was completely cured with no recurrence.

Discussion

Nasal septal abscess is defined as a collection of purulent material between the cartilage or bony septum and its mucoperichondrium or mucoperiosteum. Most patients have a history of trauma which
may be accidental or iatrogenic. Spontaneous septal abscesses are rare, acute ethmoiditis, sphenoiditis and dental infection have been mentioned as cause.

Primary nasal tuberculosis is extremely rare, indeed any nasal involvement is uncommon but in over 75 per cent of cases represents a manifestation of generalized disease.\textsuperscript{3} It is predominantly seen in females and usually in elderly.\textsuperscript{4} These lesions tend to occur on the lateral nasal wall, septal involvement is rare. Primary nasal disease is not thought to be particularly contagious.
Tuberculosis of the upper respiratory tract and nasopharyngeal region has been observed mainly in patients with active pulmonary tuberculosis. Smoking and low socio economic status were also reported as risk factors. Nasal obstruction, rhinorrhea, epistaxis and snoring are known symptoms of nasal tuberculosis. Some times patients may be totally asymptomatic when associated with nodal disease and only diagnosed by histological diagnosis. Pulmonary koch's should be excluded by chest X-ray.

In our case, the only positive examination finding was broadening of the dorsum of nose and bulging septum with no signs of active infection. X-ray chest of the patient was normal but repeat HRCT chest showed hilar lymphnode enlargement, however left supra clavicular node had resolved following AKT.

The drug therapy for nasal tuberculosis is the same as for generalized condition and should be undertaken by or at least in conjunction with a chest physician. This is especially relevant as the rate of drug resistant mycobacteria is rising. The surgical debridement is essential for diagnosis and clearance. Delayed management of septal abscess can result in compromise of the vascular supply to septal cartilage resulting in its ischaemic necrosis and saddle shaped deformity of the nose. Other complications of septal abscess documented include sepsis, bacteraemia, meningitis and maxillary hypoplasia. Initially the rise was blamed on the emerging problem relating to human immuno deficiency virus infection, but it is now recognised to be multifactorial in origin including socio economic deprivation, immigration and previous under reporting. HIV must be considered in all cases of tuberculosis as between five and ten per cent of immuno compromised patients are infected by mycobacteria species. Hence, in order to avoid unnecessary complications, which can be fatal to the patient, diagnosis should be accurate and treatment prompt.

References