Primary Tuberculosis of Nasal Septum

Sunil Kumar, Senior Resident, J. C. Passey, Associate. Professor, Deptt. of ENT,
Lok Nayak Hospital, A. K. Mandal, Professor, Deptt. of Pathology
M. A. M. College, New Delhi - 110 002

Abstract

Primary tuberculosis of nasal septum is a rare entity. Authors report a case in immunologically healthy female. Clinical features as well as diagnostic difficulties are discussed.

Nasal tuberculosis is very rare and affects cartilagenous portion of septum (Weir N, 1987). It is usually secondary to pulmonary tuberculosis. There are few reports of primary tuberculosis of nose (Sharan, 1981 : Waldman et al, 1981). Because of menace of drug resistance and AIDS epidemic, tuberculosis again is emerging out as major health problem in coming decades. This inspired us to report a primary tuberculosis of nasal septum in a young female.

Case Report

A 32 year old housewife presented in ENT outdoor with frequent crusting and occasional bleeding from right side of nose for 3 months. She had no systemic manifestations like fever or night sweats. General physical examination did not reveal any lymphadenopathy. No significant family history of tuberculosis was elicited. Anterior rhinoscopy revealed an ulcer just behind the mucocutaneous junction on right side of the septum measuring 2x4mm which did not bleed on touch. Rest of ENT and systemic examination were insignificant. Possibility of nose picking was kept and the patient was sent back home on symptomatic treatment. After 2 weeks, patient came back with similar complaints. By this time the ulcer had progressed further and formed an ulcro-fungating mass. Routine blood investigations and X-ray chest were within normal limits. Primary focus of tuberculosis was also investigated without any success. Thus based on this, a tentative clinical diagnosis of carcinoma was entertained and biopsy was done. Biopsy showed extensive areas of caseous necrosis with epitheloid cell granuloma formation. Few Langhans giant cell mixed with dense lymphocytic infiltration could also be identified,

involving overlying epithelium, subepithelium and reaching upto septal cartilage (Fig. 1). The patient was also investigated for immunodeficiency disease, AIDS, which was found to be negative. The final diagnosis of primary tuberculosis of nasal septum was made and four drug anti-tubercular treatment was stated. Since then, four months after therapy, the ulcer has disappeared and the lesion has healed up.

Disussion

Nasal tuberculosis is usually accompanied with tuberculosis of lung or extra pulmonary areas (Page & Jash 1974). Nasal septum is most frequently involved. Inferior turbinate is other common site in nose (Messervy 1971). However, primary tuberculosis of nose is very rare and generally mimics malignancy and other benign lesions like retino-blastoma (Mandal et al 1994). Wegener's granulomatosis, syphilis, leprosy and sarcoidosis (Coudery el al 1990). This form of tuberculosis is inoculated by contaminated fingers during nose picking (Messervy 1971).

Fig. 1 Tubercular granuloma involving nasal mucosa (H & E x 10).

Females are more commonly involved in middle age group. The presenting symptoms are nasal obstruction, epistaxis or crusting (Waldman et al, 1981). The present cases did not have any nasal obstruction probably because she presented at an early stage, though she had frequent episodes of epistaxis. Tuberculosis at this site forms ulceration and leads to perforation of septum (Weir, 1987). The lesion may sometime give malignant look as reported by Sim and Crowther (1988). In the differential diagnosis of such a lesion, possibility of syphilis, leprosy, midline granuloma, malignancy and sarcoidosis should be kept. Couldery (1990) reported four cases of

tuberculosis in upper respiratory tract misdiagnosed as Wegener's granulomatosis. He suggested that in such situations fresh specimen should be sent for bacteriological examination and culture. With present changing scenario of tuberculosis under the threat of AIDS and drug resistance, otolaryngologist should be aware of such possibility while making diagnosis of any ulcerative lesion in the nose.

We report this case primarily because of its rarity and atypicality in clinical presentation which can often lead to diagnostic difficulties, particularly so at a time when immunodeficiency state is fast changing the etiopathological trend of tuberculosis.

References

1. Couldery, A. D. (1990) : Tuberculosis of the upper respiratory tract misdiagnosed as Wegener's granulomatosis an important distinction. *Journal of laryngology and otology*, 104 : 255-258.
2. Mandal, A. K. and Logani, K. B. (1994) : Primary tuberculosis of eye. *Afro-Asian journal of ophthalmology* 13 (2) : 57-58.
3. Messervy, M. (1971) : Primary tuberculoma of the nose with presenting symptoms and lesions resembling a malignant granuloma. *Journal of laryngology and otology*, 85 : 177-185.
4. Page, J. R. and Jash, D. K. (1974) : Tuberculosis of the nose and paranasal sinuses. *Journal of laryngology and otology*, 88 : 579-583.
5. Sharan, R. (1981) : Primary tuberculosis of the nose. *Practitioner*, 225 (1360) : 1506-1507.
6. Sim, D. W. and Crowther, J. A. (1988) : Primary nasal tuberculosis masquerading as a malignant tumour, *Journal of laryngology and otology*. 102 : 1150 - 1152.
7. Waldman, S. R. et al (1981) : Nasal tuberculosis : A forgotten entity. *Laryngoscope*, 91 : 11 - 16.
8. Wier, N. (1987) : In Scott-Brown's Otolaryngology 5th edition. Vol. 4. Ed. Mackay I. S. and Bull T. R. pp 115-141.

Congratulations

Dr. V. P. Sood has been unanimously elected
President of All India Rhinology Society.