

CASE REPORT

TUBERCULOUS LUPUS OF NOSE: INTERESTING PRESENTATION INVOLVING FATHER AND SON

Mohan M¹, Ragunatha S², Rajendra Prasad H. M³, Manjunath M. K⁴

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INTRODUCTION: Cutaneous tuberculosis, although a disease of the past, is occasionally seen especially in the developing world. It can present in at least seven morphological types.¹ Lupus vulgaris is the commonest morphological presentation of cutaneous tuberculosis and accounts for nearly 59% cases.² Other types are Tuberculosis cutis, Tuberculosis verrucosa cutis, Scrofuloderma, Papular Tuberculid and Lichen scrofulosorum. Nasal tuberculosis (TB) comes mainly from the haematogenic or lymphatic extension of pulmonary TB. They are secondary to inoculation by scratching.³ This is a chronic, progressive and tissue destructive form of cutaneous tuberculosis seen in patients with moderate or high degree of immunity.⁴ The lesions progress by peripheral extension central healing, atrophy and scarring. Head and neck is the commonest site of lupus lesions in European countries whereas in India, the sites of predilection are the buttocks and trunks.^{5, 6} Approach to these type of lesion is high clinical suspicion and histopathology which reveal tubercles of epitheloid cells, Langhans gaint cells and lymphocytes in the dermis which are the distinct features. Here we present two cases involving father and son with lupus vulgaris of external nose, interestingly occurring at the same time.

CASE REPORT: The adult patient about 30 years presented with an ulcer and deformity over the right ala of nose associated with crusting since one month. Lesions started as a small pustule after a mild trauma which gradually spread over the nose with destruction of ala of nose on right side. Ulcer failed to heal with local treatment and was referred to us.

Examination revealed an ulcer over the lateral aspect of nose, with the alar cartilage partially eaten away. Nasal cavity showed crusting with some destruction of anterior end of inferior turbinate. Routine blood investigations including chest x-ray was normal. Biopsy and histopathological investigation of the lesion revealed turbercules of epitheloid cells, langhan's gaint cells and lymphocytes in the dermis with caseating granulomas. He was then started with Isoniazid 3oomg, rifampicin 450mg, pyrazinamide750mg and ethambutol 800mg for 2 months and isonaizid and refampicin for 4 months with DOTS follow up.

A week later he brought his son aged about 9 years, who had similar lesion on the same side of the nose of 2 months duration, believed to be caused by scratching. Diagnosis was confirmed by histopathological examination. He was started with INH – 10g/kg body weight, Rifampicin – 15 mg/kg, Pyrazinamide – 25mg/kg, Ethambutol – 30 mg/kg, Streptomycin – 20 mg/kg for a total of 2 months with regular follow by pediatrician for any toxicity of medications. Lesions healed completely with minimal cosmetic deformity.

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DISCUSSION: Lupus vulgaris is the most common form of cutaneous tuberculosis affecting humans. Its development seems to be favoured in the cooler climates and seems to be more common in women. Untreated, its course is progressive and relentless.¹ Lupus vulgaris can be acquired either exogenous or endogenous routes. Exogenous mode is by direct inoculation of the patient endogenously by haematogenous or lymphatic spread from an underlying distant lesion.

Cutaneous tuberculosis is always confirmed by biopsy and clinical correlation. Tuberculosis vulgaris is the commonest. Other types are tuberculosis cutis where there will be tubercles of Epithelioid cells, Langhans cells, lymphocytes in the dermis with caseation. Tuberculosis verrucosa cutis grossly appear as hyper keratotic lesion on exposed sites showing pappilamatosi, accanthosis with granuloma of epithelioid cells, Langhans cells and lymphocytes. Among the other type scrofuloderma, Histologically reveal tubercular granuloma with epithelioid cells, lymphoid and occasional Langerhans gaint cell. Papular tuberculid and lichen scrofulosorum are the other rarer variety.

Clinically lupus valgaris appear as flat, broad, lichenified plaques to clusters of smaller dome shaped papules to serpiginous plaques with thick scale. Often the lesions exhibit yellowish apple jelly colour on pressing a glass slide.^{1,8} There are two forms of lupus involving the nose. One an ulcerative form which spreads rapidly and almost always infected with staphylococcus. The other is a non ulcerated form progressing slowly.⁹

The disease commonly affects the nose and nasal cartilages. The nasal bones are however spared. Ulceration, necrosis and scarring occur with destruction and contractures.¹¹ These lesions heal by scarring and these are predisposed to squamous cell malignancies.^{1,10} Besides scarring and deformities lupus can also cause saddling and septal perforations much like the way Hansen's disease except for the loss of lateral eyebrows.¹

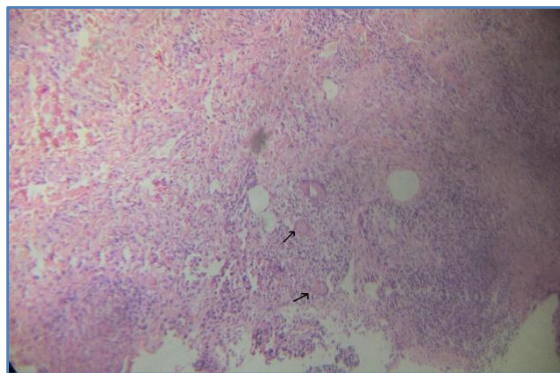
The differential diagnosis includes Wegeners granulomatosis, Basal cell carcinoma, Hansen's disease, Leishmaniasis, lupus permio, etc.^{1,4,11,12} So a high degree of suspicion is required to investigate accordingly and arrive at a proper diagnosis. Histopathological examination is reliable and shows characteristic granulomas with or without caseation. Pcr can be confirmatory in equivocal histopathology.⁷

Treatment is by antitubercular drugs of standard regime of with reconstructive surgery if needed only.⁹

In our context, both father and son presented with lesions on the right ala of the nose with cartilage destruction. Incidentally both had similar lesions on the same side as well. Both were found to have classical histopathology and were treated with antitubercular drugs as mentioned earlier.

CONCLUSION: Although the incidence of lupus vulgaris is decreasing, there may be some occasional cases which need high degree of suspicion to diagnose and treat appropriately with multi-speciality approach. This is especially true in developing countries as well as the developed countries which have seen an increase in tuberculosis due to the HIV epidemic.

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AUTHORS:

1. Mohan M.
2. Ragunatha S.
3. Rajendra Prasad H. M.
4. Manjunath M. K.

PARTICULARS OF CONTRIBUTORS:

1. Professor and Head, Department of ENT, Sri Siddhartha Medical College, Tumkur, Karnataka.
2. Professor, Department of Dermatology, Sri Siddhartha Medical College, Tumkur, Karnataka.
3. Associate Professor, Department of Pathology, Sri Siddhartha Medical College, Tumkur, Karnataka.

4. Assistant Professor, Department of ENT, Sri Siddhartha Medical College, Tumkur, Karnataka.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Mohan M,
Professor and Head,
Department of ENT,
Sri Siddhartha Medical College, Tumkur.
E-mail: mmogarnad@yahoo.co.in

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