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Bilaterally symmetrical Lupus vulgaris: A rare encounter

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Abstract

Tuberculosis is an endemic disease in India. A cutaneous post primary, paucibacillary manifestation of TB is lupus vulgaris. It affects approximately 0.1% of all cases of extra pulmonary Tuberculosis. Lesions are common in the head and neck. Lupus vulgaris is pleomorphic in presentation and warrants early recognition. We hereby report a rare case of lupus vulgaris. Case Report: A 47-year-old male patient presented with a painless gradually progressing lesion of one-year duration over the inner aspect of right arm. Six months after initial presentation new lesions appeared above the elbow on the left arm. On examination there were two subcutaneous nodules with overlying hyper-pigmented crusted plaque associated with minimal purulent discharge distributed symmetrically on medial aspect of both arms.

Keywords: Lupus Vulgaris, Bilaterally symmetrical

Introduction

Tuberculosis (TB) is an endemic disease in India. Cutaneous tuberculosis could arise either by contiguous extension or by hematogenous/lymphatic spread. Lupus vulgaris (LV) is a type of cutaneous TB that commonly occurs as a unilateral solitary lesion.[1,2] We hereby report a rare case of bilaterally symmetrical presentation of LV.

Case Report

A 47-year-old male presented with a gradually progressive painless lesion over the inner aspect of the right arm since 1 year. Within 6 months of the initial presentation, a new lesion appeared above the elbow on the left arm.

On examination there were two subcutaneous nodules with an overlying hyper-pigmented crust associated with minimal purulent discharge and symmetrically presenting over the medial aspect of both upper arms of size (2x3) cm (Fig. 1, 2).

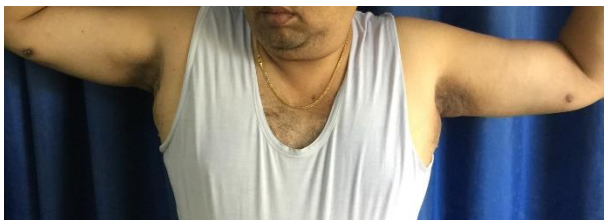
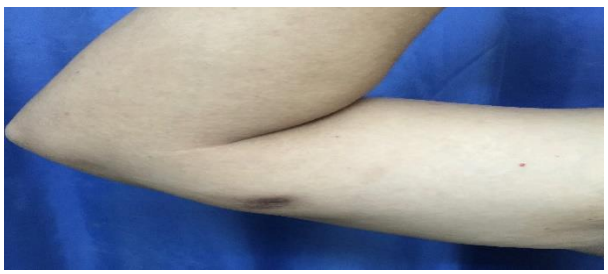
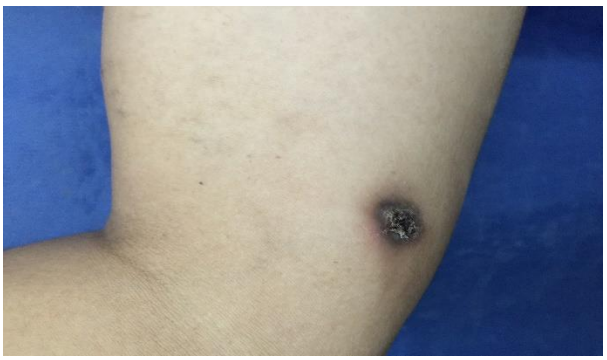


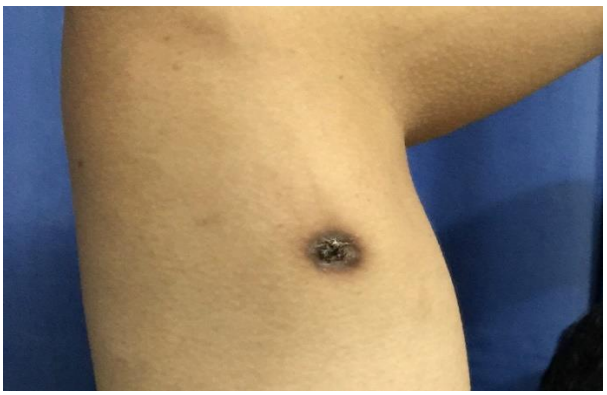
Fig. 1



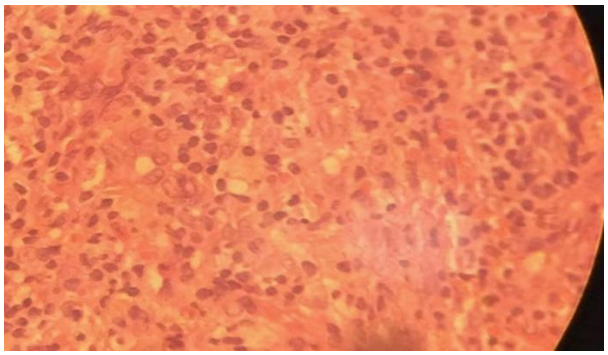
After Treatment



Before Treatment 1



Before Treatment 2



Histopath

Differentials considered included LV, Dermatofibroma, Scrofuloderma and Sarcoidosis.

All routine hematologic and biochemical parameters were normal. Patient was not an old case of tuberculosis. Chest X-ray showed no foci of tuberculosis or old pulmonary tuberculosis. Mantoux was done and found to be strongly positive. Sputum for AFB and Special stains for fungus and AFB were negative.

Histopathology demonstrated parakeratosis, acanthosis and spongiosis. A dense chronic inflammatory infiltrate with multiple epitheloid granulomas, Langhans giant cells and areas of necrosis was visualized in the dermis, favoring LV as the likely diagnosis.

Pulmonology opinion was therefore sought succeeding which the patient was started on RTNCP category 1, anti TB therapy, following which lesions started resolving and progressively healed with scarring.

Discussion

LV is a chronic and progressive form of cutaneous TB with a multitude of presentations. It has varying degrees of immunity.[3] The occurrence of LV in a bilateral symmetrical distribution has not been previously reported in literature. However, given the endemicity of TB in India with atypical forms of the disease presented, in case of the remotest suspicion also of the disease the patient warrants a thorough evaluation with appropriate investigations and only after otherwise proven should the next line of treatment be determined.

The various types of LV include plaque, ulcerative and mutilating, vegetating, tumor-like, papular and nodular forms.[3] Healing with Atrophic scarring of lesions is common. Diascopy is a test for blanchability performed by applying pressure with a finger or glass slide and observing colour changes. Lupus vulgaris shows characteristic "apple-jelly" colour.[4] In most cases, LV presents as a solitary nodule. However, in our patient it had a bilaterally symmetrical pattern, a complete new morphology which to the best of our knowledge has not been reported earlier and thus warrants mention.

Treatment for LV is the directly observed treatment short course therapy (DOTS) strategy. This was started by the World health organization. In India the Revised National Tuberculosis Control Programme (RNTCP) was started. The regimen has 2 phases the intensive phase for 2 months and continuation phase for 4 months. If severe the regimen can be extended. For initial empiric treatment of TB, the patients are started on a 4-drug regimen of isoniazid, Rifampicin, Pyrazinamide and either ethambutol or streptomycin. For cutaneous tuberculosis, category III is recommended.[5,6]

In this category, Rifampicin (R-450 mg), Isoniazid (H-600 mg) and Pyrazinamide (Z-1500 mg) are administered for three days in a week for 2 months (intensive phase), followed by R-450 mg and H-600 mg given three days in a week as a continuation phase for 4 months. If systemic infection is present category 1 with 4 drugs- Rifampicin (R-450 mg), Isoniazid (H-600 mg), Ethambutol (EMB-1200 mg) and Pyrazinamide (Z-1500 mg) are started. Patient is being followed up on monthly basis in dermatology and pulmonology outpatient department and progress is evaluated.

Cutaneous TB serves as a barometer of prevalence of tuberculosis in the community. LV needs to be recognized early in its presentation due to the propensity to cause scarring and morbidity. Strict surveillance for pulmonary and visceral foci of TB needs to be done.[7] In view of significant urban migration and crowded living conditions health surveillance and prompt institution of ATT in these patients assumes importance.

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