

## SPOROTRICHOID REACTIONS TO MYCOBACTERIAL INFECTIONS

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Four cases of cutaneous mycobacterial infections in which the clinical presentation was strongly suggestive of sporotrichosis are presented.

**Key Words :** Sporotrichoid, Lymphocutaneous, Atypical mycobacteriosis

### Introduction

Noduloulcerative lesions along the line of lymphatic drainage are commonly seen in sporotrichosis. However, such a distribution can also be seen in both tuberculous and atypical mycobacterial infections, more so in the later.<sup>1-5</sup> Review of indian literature did not reveal any such report. We report four cases of sporotrichoid lesions in mycobacterial infections from Himachal Pradesh.

### Case Reports

#### Case 1 :

A 20-years-old male farmer presented with warty lesions on left foot, lymphocutaneous type of lesions along medial side of the leg and thigh and elephantiasis of the limb (Fig. 1). Few non-tender lymph nodes were present in the left inguinal region. There was history of injury on the foot with a wooden splinter 3 years back. The initial lesion started as warty papule and new lesions appeared proximally in gradual succession alongwith swelling of the foot and the leg. Treatment with different antibiotics did not produce any relief. Routine investigative profile and chest skiagram were normal. Skin biopsy revealed non-specific inflammatory reaction. Culture for fungus was negative. He was provisionally diagnosed as lymphocutaneous

sporotrichosis but there was no therapeutic response to Potassium iodide (given for three months). A left inguinal lymphnode was then



Fig 1 : Lymphocutaneous lesions along the left leg and thigh and elephantiasis of the limb.

biopsied which showed typical tubercular granuloma. With standard antitubercular treatment (Streptomycin + INH) the lesions resolved completely after 9 months.

#### Case 2 :

A 12-years-old male student from peasant family reported to skin outpatient with verrucous lesions over right heel, lupus vulgaris

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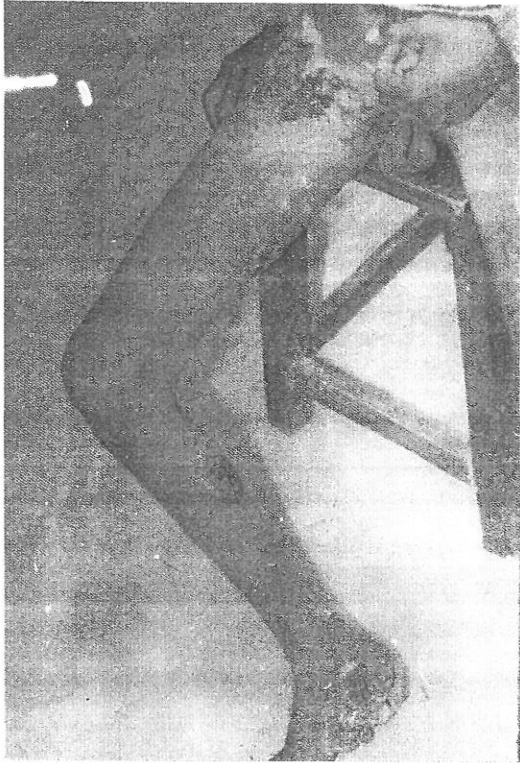


Fig 2 : Verrucous lesions over the heel, LV lesion in the inguinal region and lymphocutaneous lesions on medial side of leg and thigh.

like lesion in right inguinal region and lymphocutaneous type of lesions along the right leg and thigh which were present for the last  $1\frac{1}{2}$  years (Fig 2). There was no prior history of injury. General health was not affected, chest X-ray was normal, erythrocyte sedimentation rate was 30 mm/1st hour, smear and culture studies of the pus and tissue from one of the ulcerated thigh lesions were negative for acid fast bacilli and fungus. He was put on standard antitubercular regimen but was lost to follow up.

### Case 3 :

A 22-years-old male shopkeeper presented with multiple crusted ulcers over left side of face and bilateral cold abscesses in submandibular region of  $2\frac{1}{2}$  months duration (Fig 3). No history of prior injury could be elicited. General health of the patient was



Fig 3 : Multiple crusted ulcers over left side of face with bilateral submandibular cold abscesses.

good. Routine investigative profile including chest skiagrams were within normal limits. Smears and culture studies of the pus did not show acid fast bacilli or fungus. Skin biopsy from the margin of an ulcer showed epithelioid and giant cell granulomas. However, no AFB could be demonstrated in histopathological sections. An initial therapeutic trial with KI and Ketoconazole; presuming it to be possible sporotrichosis, had no effect. Antituberculous treatment (R+H+T), alongwith aspiration of abscesses produced partial healing of ulcers within 6 weeks and complete resolution of lesions after 9 months.

### Case 4:

A 40 years old housewife presented with a fluctuating non tender cold abscess on dorsum of left hand which had developed one month after an injury with steel wool about  $1\frac{1}{2}$

Fig. 4.

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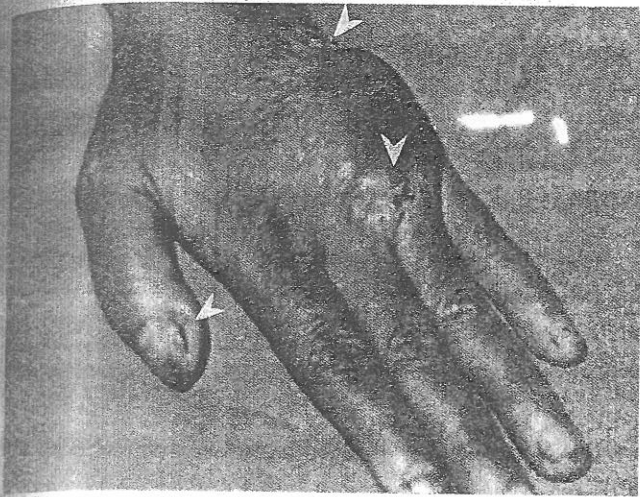


Fig. 4. Cold abscess dorsum of left hand and verrucous lesions marked with arrows.

years back. There were warty paronychia lesions over left thumb and index finger (the original sites of injury). Warty plaques were also present in the third web space and over ring finger and another one proximal to the cold abscess (Fig 4). General health of the patient was good. Routine blood tests and chest-X-rays were within normal limits. Smears of thick pus aspirated from the abscess did not show any AFB or fungal element. Culture was positive for Tubercle bacilli. She was treated with antituberculous drugs (R+H+T) and the lesions healed completely after 9 months of starting the treatment.

## Comments

In all the four cases the parts liable to injury were initially involved. In three of these cases, history clearly pointed towards inoculation at a distal site followed by appearance of new lesions proximally. The patient with facial lesions (Case-3) also had regional lymph node abscess.

Apart from the lymphocutaneous distribution of lesions two cases each had TBVC and cold abscesses and one had lupus vulgaris lesions. All the four patients were

otherwise healthy with no apparent systemic involvement.

Except for one case (case-4) where the definitive diagnosis was established by culture of *M. tuberculosis*; the diagnosis in the remaining three is presumptive, circumstantial and it is an open question whether the lesions were due to *M. tuberculosis* or atypical *Mycobacteria*. However, the therapeutic response of two of these cases to conventional antitubercular drugs does favour their being tubercular. Third case who responded to Rifampicin and INH could be either tubercular or atypical mycobacterial infection.

This report is to emphasize the possibility of sporotrichoid patterns in cutaneous mycobacterial infections. It is probable that this particular cutaneous form of the disease is much more frequent than the paucity of the reports would make one believe. Lymph node involvement and cold abscesses seen in two cases each are two important findings which are not usually seen in sporotrichosis.

## References

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