Indian Journal of Pathology and Oncology 2023;10(3):297–299

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Indian Journal of Pathology and Oncology

Journal homepage: www.ijpo.co.in

Case Report

Lichen scrofulosorum- A rare case report

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ARTICLE INFO

Article history:
Received 11-05-2023
Accepted 18-08-2023
Available online 27-09-2023

Keywords:
Lichen scrofulsorum
Cutaneous tuberculosis
Granuloma

ABSTRACT

Lichen scrofulosorum, other name "tuberculosis cutis lichenoides" which is present as lichenoid eruption of minute papules, a rare tuberculid commonly seen in children and adolescents with tuberculosis. Mostly positive tuberculin reaction strongly associated with eruption. Diagnosis can be difficult in this type of lesion which is closely resemble to other type of dermatological conditions that are often primarily considered. Here we report a case of lichen scrofulosorum in a twenty year- old female having typical grouped lichenoid papules on the neck, hand and leg associated with itching.

1. Introduction

Lichen scrofulosorum (LS) other name tuberculosis (TB) cutis lichenoides,which is a rare tuberculid seen in children and adolescents with TB that presents as a lichenoid eruption of minute papules.[1–3] These lesions are skin-colored to reddish-brown papules, often perifollicular, usually asymptomatic, mainly found on the chest, back, abdomen, and proximal parts of the limbs.[1] Strongly positive tuberculin reaction is usually associated with eruption.[1] In 1-2% from the total number of reported cases in cutaneous tuberculosis, LS is a rare form of extrapulmonary tuberculosis.[4] Clinically it is characterized by reddish perifollicular papules or skin-coloured, with a diameter of 0.5-3 mm, with a smooth surface or slightly scaly, having tendency to confluence in larger plaques, localised on the axillae, trunk and limbs.[5,6] Tuberculous granulomas in the upper dermis are characteristic finding in histopathologically.[5] Here we report a case of 20-year-old female having progressively increasing multiple small skin-colored papules present over dorsum of neck, leg and hands since 2 years.

2. Case Report

Here we report a case of 20-year-old female having progressively increasing multiple small skin-colored papules over dorsum of hands (Figure 1) and leg (Figure 2) and neck (Figure 3) since 2 years. Mildly itchy lesions present with history of evening rise of temperature. History of anorexia, weight loss since 1 years. There was no history of cough, fever, or any other specific systemic symptoms. She had no family or past history of TB. No lymphadenopathy or organomegaly were seen. Other systemic examination of the cardiovascular, respiratory, abdominal and central nervous systems did not reveal any abnormalities. Examination of nails, hair and mucosal surfaces was normal.

2.1. Microscopy

Section from the biopsy tissue showed epidermis lined by stratified squamous epithelium. The underlying dermis showed ill formed granuloma comprising of langhans type of giant cells along with lymphocytes and plasma cells.

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https://doi.org/10.18231/j.ijpo.2023.065

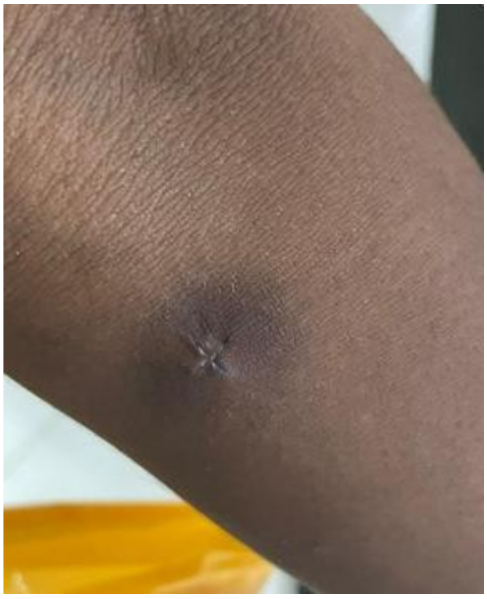

Fig. 1: Lesion over dorsum of hand

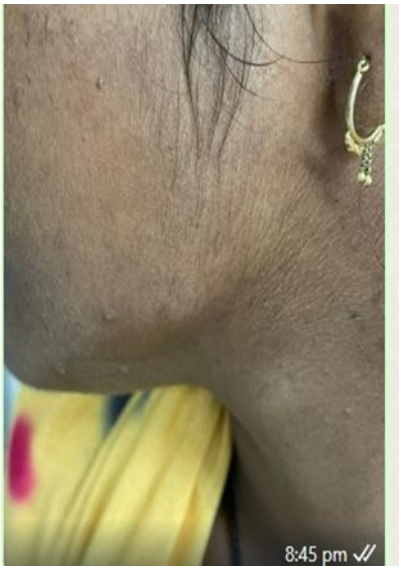

Fig. 3: Lesion over neck

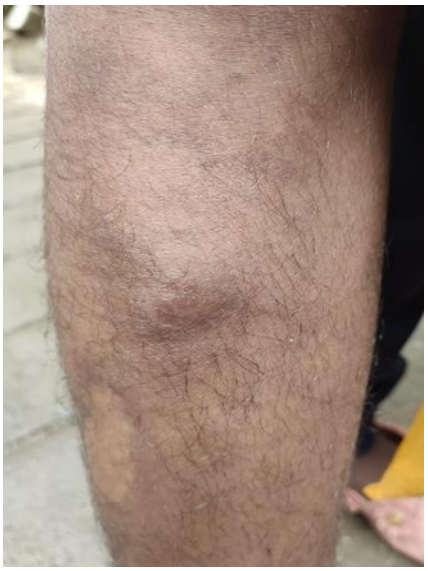

Fig. 2: Lesion over leg

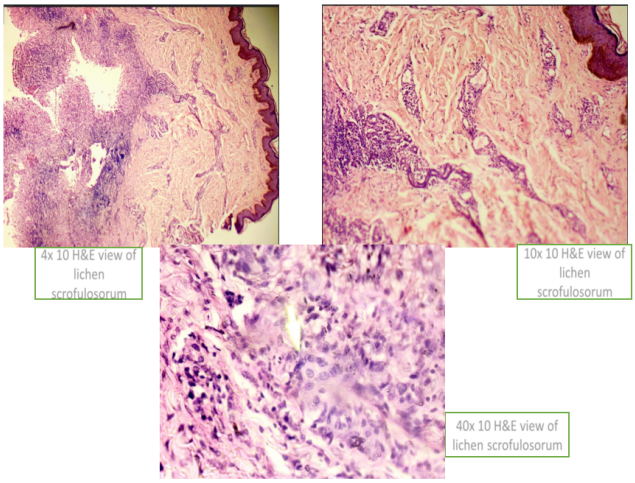

Fig. 4:

Also seen were perivascular chronic inflammatory infiltrate comprising predominantly of lymphocytes. No caseous necrosis was seen.

3. Discussion

A rare skin conditions which is Cutaneous tuberculosis, having significant issues of therapeutic and diagnostic approach, with a large spectrum of clinical manifestations.[1] LS is a rare tuberculid,clinically it is characterized by tiny, perifollicular papules, skin-colored, arranged in groups, having smooth surface, but occasionally fine scales with spiny projections may be seen.[1] Non-caseating, epithelioid cell granulomas type of histology in upper dermis and comprising of langhan's type of giant cells along with lymphocytes and plasma cells. In the histology specimen, Tubercle bacilli are almost never seen, neither can they be cultured.[1] So, rarely antigen of mycobacterial TB has been demonstrated. Here we presented the case of a patient diagnosed with lichen scrofulosorum, which is rare manifestation of skin tuberculosis, in cutaneous tuberculosis with a sectrum of frequency of 6-8%.[5,7] Lichen scrofulosorum is a paucibacillary form of cutaneous tuberculosis since the special stains or by microbial culturing mycobacteria are almost never identified, confining the usefulness of these investigations.[5] The gold standard in the diagnosis of an active infection

and allows the identification of M. tuberculosis subspecies is the bacterial culture on the selective media Lowenstein-Jensen and their susceptibility to antibiotics.[5] The golden standard for diagnosis is with the help of histopathological examination, in association with the other internal active tuberculosis infection sites confirmation.[5] Lichen scrofulosorum is an uncommon entity.[8] It is one of the tuberculides, which results from silent haematogenous dissemination of bacilli in an individual strongly sensitive to Mycobacterium tuberculosis.[8] Lichen scrofulosorum can mimic histologically (non- caseating granuloma) and clinically (micropapular rash).[8] The differentiation between these two with the help of favorable response to ATT and based on the Mantoux test.[8] Progressively increasing multiple small papules skin-colored over dorsum of hands, neck and leg since 2 years. Patient on ATT treatment for 2 weeks shows positive response after taking medication.

4. Conclusions

Lichen scrofulosorum is an uncommon but also rare cutaneous manifestation of tuberculosis. This case reflects the problems encountered in the diagnosis and their treatment of cutaneous tuberculosis, and also individual characteristics of the clinical picture of disease progression and the immune status. A high index of awareness and suspicion is required for diagnosis.LS also associated with Systemic tuberculosis and a prior BCG inoculation which does not protect against development of LS. The presence of persistent granulomatous lesions and papular lesions resistant to other type of therapies should be taken into consideration at diagnosis.

5. Source of Funding

None.

6. Conflict of Interest

None.

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Cite this article: Singh S, Zaidi N, Irfan S, Lal N. Lichen scrofulosorum- A rare case report. *Indian J Pathol Oncol* 2023;10(3):297-299.