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Case Report

Lupus vulgaris masquerading tinea corporis

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Abstract Lupus vulgaris is one of the most common forms of cutaneous tuberculosis and a great masquerader. We report a case of lupus vulgaris with annular plaque lesion with central clearing that have been misdiagnosed and treated inappropriately for many months as tinea incognito. It is essential to keep the diagnosis of Lupus Vulgaris in mind when dealing with cases of various skin lesions that have not responded to regular treatment for a long period of time.

Key words
Lupus; Plaque; Tuberculosis; Tinea.

Introduction

Lupus vulgaris is a form of cutaneous tuberculosis which can mimic various dermatological conditions. We report a case of lupus vulgaris which was incorrectly diagnosed and treated with antifungals for tinea incognito.

Case Report

A 76-year-old male presented with a large scaly annular plaque on his right elbow for 2 years. He was treated with a presumptive diagnosis of tinea incognito using topical and systemic antifungals with poor response. On assessment, there was a hyperpigmented scaly plaque of size 25×20cm in annular pattern with central clearing relatively with ill- defined margins and extending to right arm above and medial aspect of right forearm below. On histopathological analysis the dermis included a cluster of epithelioid histocytes encircled by lymphocytes and Langhan's giant cells, which was indicative of Lupus Vulgaris. No organism was found in skin scrapings or plaque lesion cultures. A KOH analysis of the skin scraping revealed no fungal elements. The chest X-ray was normal, and the 48-hour Mantoux test result was 15 mm. After four months of treatment, the patient who is presently receiving ATT and taking a set daily dose of the drugs isoniazid, rifampicin, pyrazinamide, and ethambutol has significantly improved.

Discussion

In European nations, the head and neck region is where the majority of lesions are documented; in India, lesions are brought on by inoculation while barefoot walking or sitting naked on the ground.[1] Erasmus Wilson first used the name "lupus" to describe a group of lesions that resembled wolf bites that had developed into ulcers. LV may cause significant scarring, fibrosis, joint deformity, perforation, and local tissue loss if left untreated. Even cutaneous cancers including lymphoma, basal cell carcinoma, sarcoma, and squamous cell carcinoma can result from it. There have also been cases of M. Bovis and M. Xenopi being linked to lupus lesions in addition to M. tuberculosis.[2] Lymphatic or hematogenous spread of infection from an endogenous focus in immunocompetent hosts, direct dissemination from an underlying lymph node, joint, or bone

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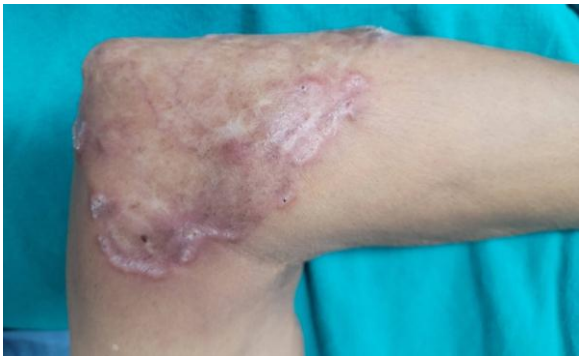

Figure 1 A 75 years old male with large ill-defined, hyperpigmented scaly plaque on elbow.

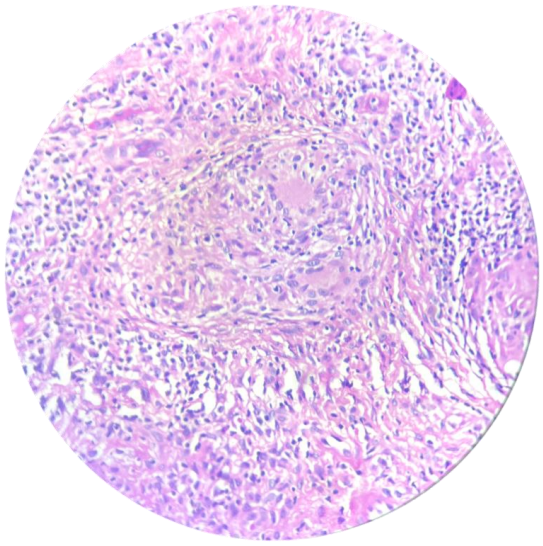

Figure 2 Histopathological examination showing collection of epithelioid histocytes surrounded by lymphocytes and Langhan's giant cells.

lesion, or exogenous inoculation by direct skin contact are all possible causes of LV.

LV begins as a soft, smooth-surfaced plaque that is asymptomatic, skin-colored or erythematous, later becoming infiltrated and progressively enlarging. The lesion worsens in the periphery while simultaneously developing atrophy or scarring centrally. The various morphological presentations of LV include ulcerative, vegetative, hypertrophic, frambersiform, gangrenous, annular, sporotrichoid, lichenoid, necklace forms.[3]

The plaque on our patient's skin exhibited active keratotic papules around the edges and a clear, atrophic area in the centre with fine scales that resembled tinea infection. In a case with LV across the buttocks and groin region that had been present for 10 years, Heo *et al*. described lesions that looked like Tinea cruri infections.[4]

Low positive rates in LV are found in a number of tests, including Mantoux, PCR, culture in Lowenstein Jensen medium, and quantiferon gold test. Histopathological study of the upper and lower dermis reveals Langhan's cells and a non-caseating granuloma formed of epithelioid cells, which is indicative of LV.[5] According to WHO Guidelines or national recommendations, ATT is the preferred course of therapy.

Prima facie Lupus vulgaris resembles tinea incognito which delayed a proper diagnosis and course of therapy was significantly delayed for our patient. When dealing with cases of diverse skin lesions that have not responded to usual therapy for a prolonged length of time, it is crucial to keep the diagnosis of Lupus Vulgaris in mind.

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