Case Report

Lupus miliaris disseminatus faciei: A rare case report

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Abstract

Lupus miliaris disseminatus faciei (LMDF), initially thought to be a tuberculid, is an uncommon independent clinicopathological entity characterized by asymptomatic erythematous papules over the face, usually encountered in young individuals and rarely in the extremes of age group. It was initially thought to be a tuberculid due to similar histopathological features between the two entities. LMDF has a spontaneously resolving course; however, due to its ability to cosmetically debilitate an individual, patients often seek a dermatologist's opinion. Various treatment options, such as oral tetracyclines, steroids, and retinoids, have been tried with varying results. Around 200 cases have been reported till date, and further studies are needed to understand the etiopathogenesis and management of this distinct dermatosis. We report a case of LMDF in a young lady who was started on oral minocycline and topical tacrolimus but was lost to follow-up. We hereby report this case for its rare occurrence. The present paper highlights the clinical importance of LMDF mimicking granulomatous facial dermatitis and the need for further laboratory investigations to rule out tuberculosis. This report reviews the available literature and presents a patient with LMDF. Biopsy done on one of the lesions over face showed epidermal atrophy, dermal perivascular and periadnexal inflammatory infiltrate, focal granulomatous inflammation with multinucleated giant cells, with the special stain for acid-fast bacilli being negative. These findings suggested LMDF. LMDF is a distinct granulomatous inflammatory dermatosis not associated with cutaneous tuberculosis.

Keywords: Facial, granulomatous, lupus miliaris disseminatus faciei, tuberculid

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INTRODUCTION

Lupus miliaris disseminatus faciei (LMDF) is an uncommon granulomatous inflammatory dermatosis, mostly affecting young adults of both sexes.[1] It is characterized by asymptomatic reddish-brown papules over the central area of the face.[2] Some believed it to be a result of hypersensitivity reaction to tuberculosis, while others thought that it could be a variant of granulomatous rosacea.[3] We report a case of LMDF in a young female in her thirties who presented with raised lesions over the face, mostly concentrating over the central area. Clinical history, systemic examination, and certain laboratory investigations ruled out the possibility of systemic tuberculosis. The main complication associated is its potential to scar which can be prevented by early diagnosis and treatment. The patient was started on oral minocycline and topical tacrolimus but was lost to follow-up. We report this case for its uncommon occurrence.

CASE REPORT

A 38-year-old woman presented with asymptomatic eruptions over the glabella, periorbital region, and

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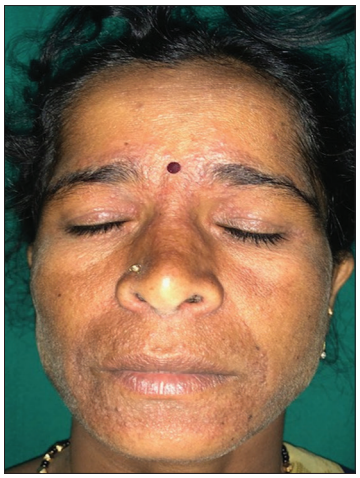

Figure 1: Multiple erythematous papules over glabella, upper eyelid, perioral region, and chin

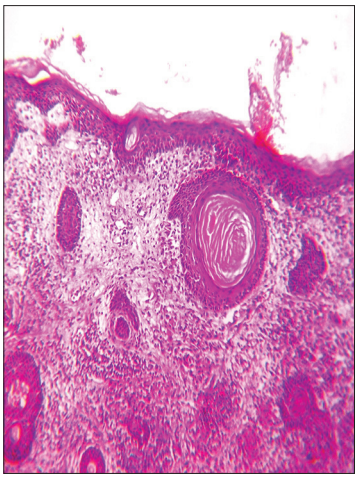

Figure 2: Tissue section of skin displaying atrophic epidermis

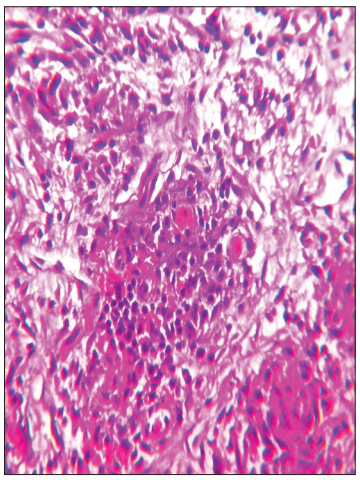

Figure 3: Tissue section of skin displaying epithelioid cell granuloma

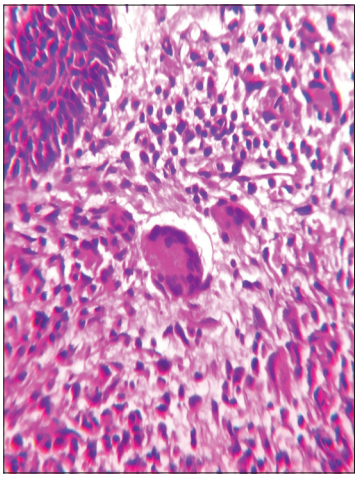

Figure 4: Tissue section that shows Langhans multinucleated giant cell

perioral region for 7 months, with no history of usage of topical medications following the appearance of lesions [Figure 1]. There was no history of fever, night sweats, significant reduction in weight, or contact with patients diagnosed with tuberculosis in the past. Her past history and family history were insignificant. Local examination revealed multiple monomorphic erythematous to brown, firm papules. Mucosa, trunk, limbs, palms, soles, hair, and nails were normal. Systemic examination revealed no abnormality. Tuberculin test was negative. Punch biopsy performed from one of the papules over the chin showed focal granulomatous inflammation with multinucleated giant cells (Langhans type), perivascular and periadnexal mixed inflammatory cell infiltrate [Figures 2-4]. Mantoux test was negative, and the chest X-ray was within normal limits. After ruling out cutaneous and systemic tuberculosis, the patient was started on oral minocycline and topical tacrolimus. The response to treatment could not be noted as the patient was lost to follow-up.

DISCUSSION

LMDF, initially described by Fox in 1878, is an uncommon granulomatous inflammatory dermatosis.[4] Young adults commonly between the second and fourth decades of life are affected.[5] However, this condition has also been found to affect the extremes of age group. On examination, monomorphic follicular and/or nonfollicular red-brown papules over the centrofacial area are found with a self-limiting course taking about 1–2 years to resolve. Few cases are characterized by extra facial involvement. On histopathological evaluation, periadnexal and perivascular lymphohistiocytic infiltrate can be seen in the early stage. In the completely developed stage, epithelioid cell granuloma with or without central necrosis and abscess are observed, and late stages demonstrate perifollicular fibrosis with inflammatory cell infiltrate.[1] Initially, LMDF was thought to be a tuberculid. However, later, it was considered to be a variant of granulomatous rosacea, but this theory was not accepted due to the absence of

flushing, erythema, and telangiectasia, which are usually encountered in rosacea. Few thought that demodex folliculorum could be responsible for the causation of this condition.[3] According to some reports, LMDF could possibly be the result of hypersensitivity reaction to destroyed hair follicles or ruptured epidermal cysts.[2] At present, most of the authors believe LMDF to be a distinct pathological entity not related to cutaneous tuberculosis. The most common complication of LMDF is pitted scarring, which can be cosmetically debilitating, warranting a dermatologist's attention. Treatment of LMDF can often be challenging due to the paucity of studies in the literature.[6] Owing to its self-limited course, the response to treatment is difficult to assess. Minocycline and doxycycline are considered the first line of treatment but are not always effective.[2,3] The other systemic modalities used are corticosteroids, isotretinoin, dapsone, and clofazimine. In addition to this, topical tacrolimus with dapsone or metronidazole, 1450 nm diode laser, and 1565 nm nonablative fractioned resurfacing laser have been found to improve the lesions of LMDF.[7] Scarring can be prevented by early intervention with low-dose corticosteroids and managed with carbon dioxide laser or 100% trichloroacetic acid application.

CONCLUSION

LMDF, a distinct granulomatous inflammatory dermatosis is being presented for its rarity.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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