Skin-colored papules on the face

A 39-year-old male agriculturist presented with progressive development of multiple asymptomatic papules on the face, chest and back of 1-year duration. There was no history of drug intake or application of topical corticosteroids on the face. A review of systems, as well as family history, was unremarkable. Physical examination revealed multiple skin-colored firm papules on the nose, malar area, ears [Figure 1]. Similar lesions were present on the chest and back. The patient was provisionally diagnosed as acne vulgaris and treated with anti-acne preparations for 4 weeks. Due to lack of improvement in the clinical picture, a biopsy of the lesion was performed [Figure 2].

WHAT IS YOUR DIAGNOSIS?

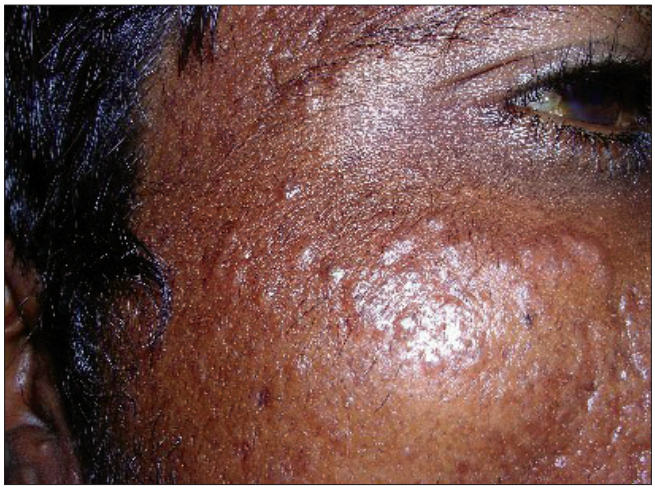

Figure 1: Multiple, skin colored papules over face

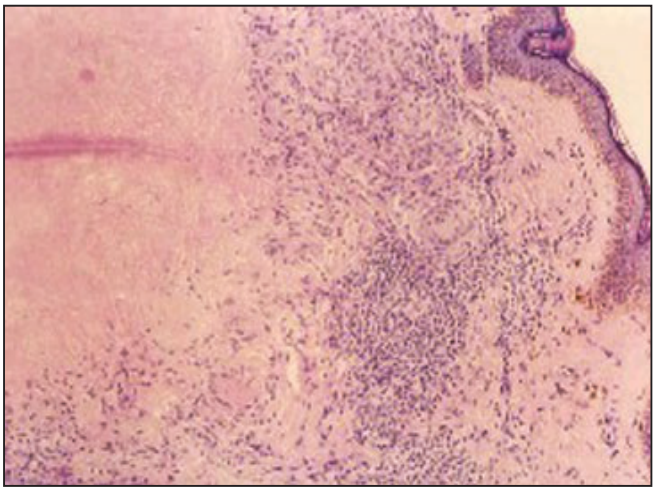

Figure 2: Histopathology (H and E, X200)

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Diagnosis: Lupus miliaris disseminatus faciei

Biopsy from the papule showed epidermal thinning with follicular plugging. Periadnexal granulomas composed of Langhans giant cells, epithelioid cells and lymphocytes with areas of caseous necrosis were seen in the dermis, suggestive of lupus miliaris disseminatus faciei.

DISCUSSION

Lupus miliaris disseminatus faciei (LMDF) is an uncommon chronic inflammatory dermatosis characterized by erythematous or flesh-colored papules distributed symmetrically across the central part of face, particularly the nose, eyelids and upper lip. It is most commonly seen in young adults in their 20s.

The papules are smooth surfaced, and 1-3 mm in size. Occasionally, the lesions may be generalized and may appear on the trunk and extremities. Surrounding erythema is not a characteristic feature but may be present. The etiology of LMDF is unclear. Studies have failed to demonstrate *Mycobacterium tuberculosis* or other mycobacterial disease by culture or polymerase chain reaction.[1] Several authors suggest that LMDF is a reaction to *Demodex folliculorum*, since the usual distribution coincides with that of rosacea; however, a definite association has not been confirmed.[2] Several others suggest LMDF to be a granulomatous reaction to hair follicle destruction or ruptured epidermal cysts. This condition develops rapidly, is associated with scarring and may be resistant to conventional treatment; thereby differentiating it from granulomatous rosacea.

Granulomatous rosacea (GR) is a distinct subtype of rosacea, clinically characterized by yellowish discrete facial papules. The presence of granuloma resembling tuberculosis led to the earlier designation of this condition as 'Lewandowsky's rosacea-like tuberculid' and 'micropapular tuberculid.' Although the exact etiopathogenesis of GR is unknown, a role of delayed hypersensitivity reaction against keratinized cells, pilosebaceous structures and Demodex folliculorum has been suggested. GR can mimic sarcoidosis, LMDF and tuberculosis - both clinically and histologically. Of these, the relationship between LMDF and GR is most intriguing.[3] Though clinically both may have similar features, there are some subtle differences between the two. Eye involvement can be seen in 3-54% of cases of rosacea, while it is not reported in LMDF.[4] On histopathology although dermal epitheliod cell granulomas are observed in both, caseation necrosis is not seen in GR.[5] The lesions of LMDF in their natural course regress spontaneously in 12-18 months, followed by scarring. On the contrary, GR has no tendency towards spontaneous resolution or scarring.[6] Corticosteroids are quite effective in the treatment of LMDF; however, they aggravate the lesions of GR. In view of all these differences, GR should be regarded as an entity distinct from LMDF. Our patient was a case of LMDF in view of the characteristic clinical picture and histopathology showing tuberculoid granuloma with caseation and absence of eye involvement.

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