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## **Dexamethasone induced lupus miliaris disseminatus faciei : a case report**

**Key words:** Lupus miliaris disseminatus faciei, systemic dexamethasone use

### **TO THE EDITOR**

Lupus miliaris disseminatus faciei (LMDF) is a chronic inflammatory disorder that clinically manifests either singly or in crops of multiple indolent bright-red or brown dome-shaped papules. A 24-year-old man with a history of intramuscular dexamethasone administration (3 weeks before) visited our clinic with multiple red papules on his face. The diagnosis of LMDF was concluded which is the first case detected after systemic steroid use.

LMDF is a rare dermatologic disease that is characterized clinically by the presence of discrete, reddish-brown dome-shaped papules on the eyelids, cheeks and nasolabial folds. Although the precise pathomechanism of LMDF is still unknown, it is highly likely that an immune response to the pilosebaceous units is involved in the granuloma formation in LMDF (1,2). Although the histopathologic features of LMDF are similar to sarcoidosis and tuberculosis, no relationship exists between them. It is self-limited and leaves scars when it heals. Appropriate early treatment reduces the duration of the disease and scar formation (3,4).

A 24-year-old male patient was admitted to our clinic complaining of acne-like eruptions on the face. His history revealed intramuscular dexamethasone administration 3 weeks before admission. Physical examination revealed widespread papular and inconsiderable pustular lesions without comedonal lesions (Figure 1). Skin biopsy showed granulomatous changes in the dermis consisting of surrounded epithelioid histiocytes with central exudate and polymorphonuclear leukocytes. In addition, inflammatory infiltrate ingredients with PMNL and mononuclear cells were present in the perivascular space of the upper and mid dermis (Figure 2). There was no family or personal history of skin lesions or tuberculosis. The routine laboratory tests were normal. No abnormalities were seen on the chest X-ray. The diagnosis of LMDF was concluded and the patient was treated with oral tetracycline 1gr/day for four months. We examined the patient at monthly intervals and all lesions had disappeared without leaving any scars by the fourth month of treatment.

LMDF occurs primarily in young adults, but has also been reported in adolescents (5,6). Even though it is predominantly found in the center of the face, sometimes it can spread to the extremities and the trunk. Many authors now consider LMDF to be an extreme variant of granulomatous rosacea, whereas others believe it is a distinct entity because of its characteristic histopathology and the occasional involvement of noncentral facial areas. Although the etiology of this condition is unclear, some authors have considered that it may be a granulomatous reaction to follicular contents such as keratins and sebum, or even to Demodex follicularum. This could explain why LMDF is very rare in elderly individuals; such a reaction rarely develops since the pilosebaceous apparatus is less active in this age group (7).

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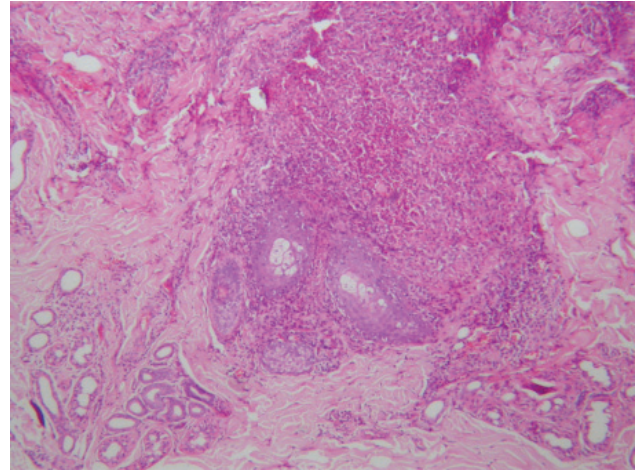
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**Figure 1:** Reddish-brown papules on the face.



**Figure 2:** Granulomatous infiltrations in the dermis (H&E x4).

Skin biopsy may be necessary if the diagnosis is in doubt. Biopsy may help to distinguish LMDF from the more common granulomatous rosacea, sarcoidosis, or benign adnexal neoplasms such as syringomas. Early lesions show superficial perivascular and periappendiceal lymphocytic infiltrates with a few histiocytes and neutrophils. Fully developed lesions show round granulomas, often with caseation necrosis (1). Granulomatous rosacea cases following topical (8,9) or inhaled (10) steroid administration have been reported in the literature. Perioral dermatitis consequent to systemic steroid use has also been described (11,12), but this is the first case of LMDF due to systemic steroid use. Currently, the mechanism of how steroids trigger LMDF is unclear. The predilection of rosacea and LMDF by steroids suggests that LMDF may be a different entity of rosacea.

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