



## LMDF IN FOCUS: AN INDEPTH CASE REPORT

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**ABSTRACT** Lupus miliaris disseminatus faciei (LMDF) is an idiopathic granulomatous disease predominantly affecting facial skin, particularly the eyelids. Clinically, it is characterized by an asymptomatic papular eruption mainly involving the central face, typically around the eyes. Here we report a case of LMDF in 37 year old male.

**KEYWORDS :****INTRODUCTION**

Lupus miliaris disseminatus faciei (LMDF), first described by Fox in 1878, is a rare granulomatous inflammatory dermatosis that mostly affects young adults. It is characterized clinically by a bilaterally symmetrical papular eruption located on the central area of the face, and histopathologically by epithelioid cell granulomas with caseous necrosis. Despite the characteristic clinical-pathological features, its etiopathogenesis remains unknown and the treatment is often unsatisfactory.

**Case Report**

A 37-year-old male came with complaints of multiple tiny raised lesions over face for 4 months. It initially started with one lesion over left lower eyelid which gradually progressed to involve other areas of the face with occasional itching. No history of photosensitivity, drug intake prior to onset of the lesions, bleeding from the lesions, similar lesions anywhere else on the body or similar lesions in family members. Not a k/c/o diabetes mellitus, systemic hypertension, TB or asthma. On examination, multiple skin-colored papules with surrounding erythema were seen over the face measuring approximately 0.25 x 0.25 cm, mainly involving the periocular areas and malar areas bilaterally. On palpation, lesions were non tender, non-indurated, soft to firm in consistency. No evidence of regional lymphadenopathy or oral involvement. No evidence of lesions elsewhere on the body. Based on clinical features the differential diagnosis are acne vulgaris and rosacea. Dermoscopy (polarized; non-contact; 20x magnification, Site: Lateral side of left eye.) showed Follicular keratotic plug, radiating structureless areas, few yellowish globular structures on diffuse background of erythema. Perilesional accentuation of pseudo-reticular network of pigmentation was present. Multiple yellow dots were seen around the lesion, loss of the same over the lesion. 3 mm punch biopsy was taken from a papule over the lateral side of left eye. Mild epidermal atrophy, dense inflammatory infiltrates in the upper dermis invading the epidermis from below. Inflammatory cells forming a granuloma in the upper dermis was observed. Multiple histiocytes and lymphocytes and few foci of epithelioid cells were seen. Langanhan' giant cells were seen amidst the focus of the granulomatous infiltrate. Mantoux test was done in view of cutaneous tuberculosis but was negative. Chest Radiograph showed no abnormalities. The patient was started on antibiotics & dapsone as main mode of treatment. The patient is on regular follow-up.

**DISCUSSION**

LMDF which is also known as granulomatous rosacea (acne agminata) presents with facial papules which are dome shaped and flesh colored to dull red brown. These papular eruptions are either single or found in groups most commonly affecting the central region of the face mainly involving areas of eyelids and upper lips.

Lesions generally resolves spontaneously and may not reoccur. The physicians must take note about the permanent facial scarring due to LMDF. LMDF is also termed as FIGURE (facial idiopathic granulomas with regressive evolution). Some authors consider LMDF as a variant of granulomatous rosacea considering its location but it differs clinically as LMDF doesn't present with flushing, erythema or worsen by spicy food habits and alcohol and also LMDF heals with

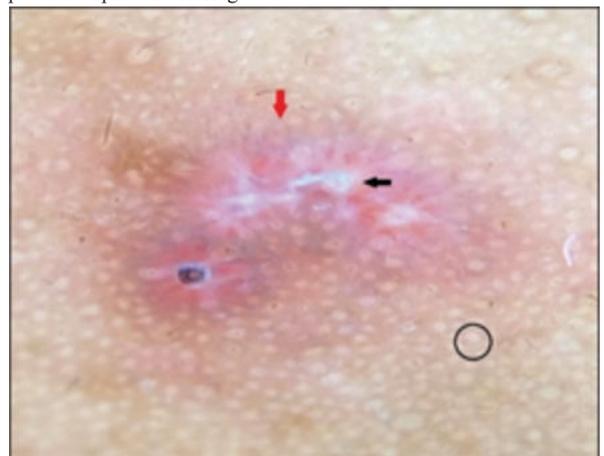
scarring. Clinically related differential diagnosis sarcoidosis, can be differentiated by physical examination, diascopy and systemic manifestation. The striking dermoscopic finding of LMDF like follicular keratotic plugs and vessels over the structureless yellow area, which are usually absent in sarcoidosis and lupus vulgaris helps in differentiating it from LMDF. Presence of comedones and pustules and effective response with topical retinoids helps in differentiating acne vulgaris from LMDF

Histopathology will usually present with large area of caseous necrosis surrounded by aggregates of epithelioid histiocytes and sometimes Tubercle is formed by multinucleate giant cells with peripheral sparse lymphoid inflammation. The histopathologic findings may resemble tuberculosis. Regardless of histologic findings, LMDF does not have any relation with tuberculosis. FACE (Facial Afro-Caribbean Childhood Eruption) a granulomatous dermatitis condition has to be differentiated from LMDF with its important histopathological finding namely dermal granulomatous infiltrate without necrosis.

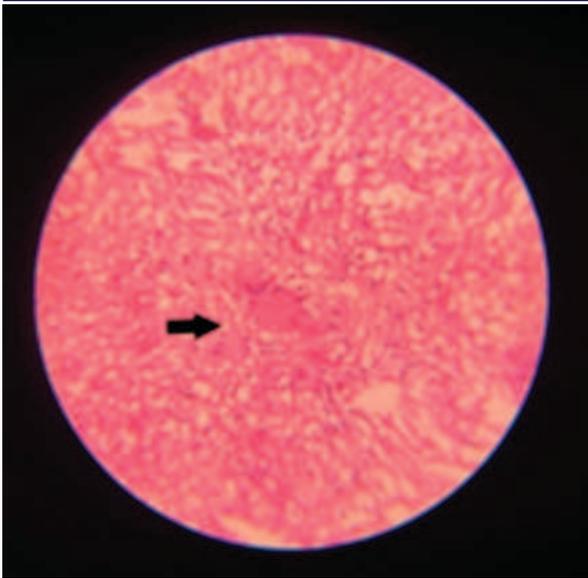
As on date, there is no FDA approved treatment for LMDF. Most common mode of treatment done is long term usage of tetracycline antibiotics, dapsone, isotretinoin, clofazimine & several other therapies. According to few studies early initiation of low dose systemic corticosteroids can prevent scarring. Alternative ways such as 1450 nm and 1565 nm non-ablative fractionated laser resurfacing can also be used for scarring.

**CONCLUSION**

Hereby we summarize a case of LMDF, it's histological and dermoscopic findings which will enlighten the physician in differentiating it from other similar conditions. LMDF which is a rare entity should be diagnosed early and initiate treatment as early as possible to prevent scarring.



**Figure 1-** Dermoscopy Showing Follicular Keratotic Plug, Radiating Structureless Areas, Few Yellowish Globular Structure On Diffuse Background Of Erythema



**Figure 2-** Inflammatory Cells Forming A Granuloma In The Upper Dermis, Multiple Histiocytes And Lymphocytes And Few Foci Of Epithelioid Cells Seen

#### REFERENCES

1. Gorham NC, Jacobs J, Wu SZ. Response of Severe Lupus Miliaris Disseminatus Faciei to Treatment With Ruxolitinib Cream. *JAMA Dermatol.* 2023 Jul 01;159(7):790-791. [PubMed]
2. Toda-Brito H, Aranha JMP, Tavares ES. Lupus miliaris disseminatus faciei. *An Bras Dermatol.* 2017 Nov-Dec;92(6):851-853. [PMC free article] [PubMed]
3. van de Scheur MR, van der Waal RI, Starink TM. Lupus miliaris disseminatus faciei: a distinctive rosacea-like syndrome and not a granulomatous form of rosacea. *Dermatology.* 2003;206(2):120-3. [PubMed]
4. Rogel-Vence M, Carmona-Rodriguez M, Herrera-Montoro V, González-Ruiz L, Cortina-de la Calle MP, Sánchez-Caminero MP. Lupus miliaris disseminatus faciei with complete response to isotretinoin. *Dermatol Online J.* 2021 Jan 15;27(1) [PubMed]
5. Al-Mutairi N. Nosology and therapeutic options for lupus miliaris disseminatus faciei. *J Dermatol.* 2011;38:864-873. [PubMed] [Google Scholar]
6. Rocas D, Kanitakis J. Lupus miliaris disseminatus faciei: Report of a new case and brief literature review. *Dermatol Online J.* 2013;19:4-4. [PubMed] [Google Scholar]
7. Esteves T, Faria A, Alves R, Marote J, Viana I, Vale E. Lupus miliaris disseminatus faciei: A case report. *Dermatol Online J.* 2010;16:10-10. [PubMed] [Google Scholar]
8. Virendra N.S., Govind S., Ashok K.A., Vishwanath R., Sonal S. Lupus miliaris disseminatus faciei part II: an overview. *Skinmed.* 2005;4:234-238. doi: 10.1111/j.1540-9740.2005.03544.x. [DOI] [PubMed] [Google Scholar]