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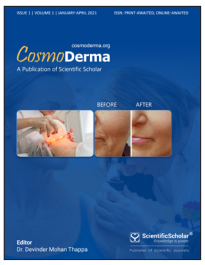

Spot the Diagnosis

Connecting dermoscopy to histopathology of succulent bumps in skin of color

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Quick Response Code:

A 38-year male presented with multiple red and raised lesions over forehead and right side of nose for 3 months. These lesions were associated with mild itching with no history of pain or burning sensation. He denied any history of topical or systemic treatment for the same. On examination, multiple erythematous to brown plaques measuring smallest being 1 cm × 0.5 cm and largest being 2 cm × 1 cm were seen over both sided of forehead and right side of nose with prominent follicular openings giving rise to peau d'orange appearance [Figure 1].

Dermoscopic examination revealed dotted and linear vessels, prominent follicular openings, whitish grey translucent areas, shiny white streaks, rosettes, and focal brown areas [Figure 2].

Histopathological examination showed atrophic epidermis with narrow grenz zone and granuloma consisting of lymphocytes, plasma cells, neutrophils, and mast cells admixed with eosinophils. Perivascular lymphocytic infiltrate with nuclear dust was evident with no involvement of adnexal tissue [Figure 3a and b].

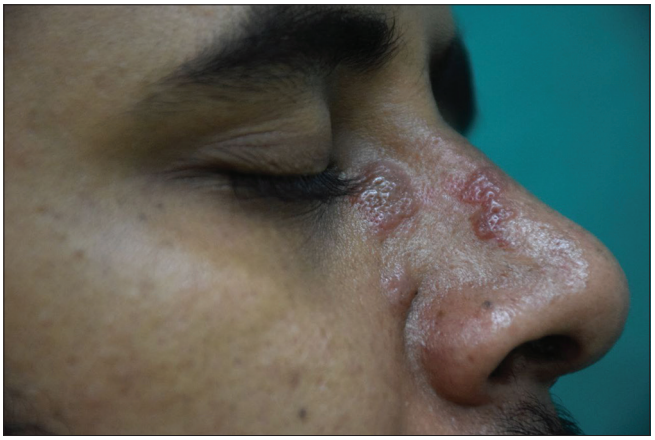

Figure 1: Multiple erythematous to brown plaque with peau d'orange appearance.

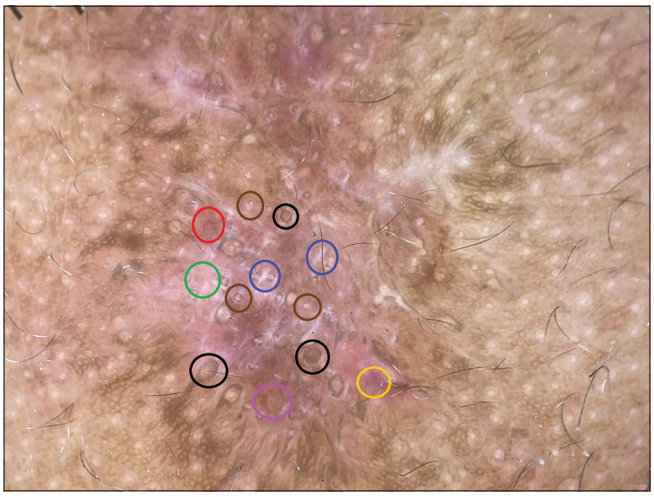

Figure 2: Dermlite DL4, polarized mode ×10 magnification revealed prominent follicular openings (black circle), rosette (brown circle) linear blood vessel (red circle), shiny white streaks (blue circle), structureless translucent area (green circle), focal brown area (pink circle), and dotted blood vessel (yellow circle).

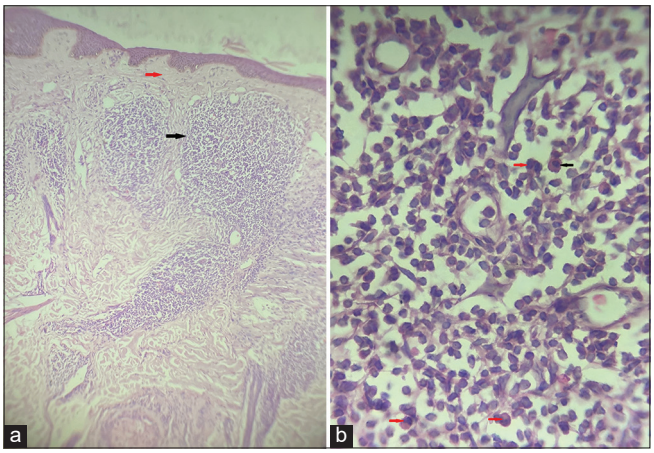

Figure 3: (a) H and E stain on ×100 shows atrophic epidermis with grenz zone (red arrow) and well-formed granuloma (black arrow) in papillary dermis. (b) H and E stain on ×400 shows perivascular infiltrate consisting of plasma cells, mast cells (black arrow), lymphocytes, neutrophils, and eosinophils (red arrow).

What is the diagnosis?

Answer - Granuloma faciale

DISCUSSION

Granuloma faciale is a benign chronic inflammatory disorder with unknown pathogenesis. It is usually seen in middle aged men. It presents as solitary asymptomatic red brown plaque with peau d'orange appearance on face with predilection for forehead, cheek and preauricular area.[1] Less often multiple lesions can be seen as seen in our case. Histopathology reveals perivascular and interstitial infiltrates of neutrophils, lymphocytes, mast cells, and plasma cells admixed with eosinophils in the dermis with evident Grenz zone.[2,3] It shows leukocytoclastic vasculitis and fibrosis.

Dermoscopy shows whitish grey areas, prominent linear, and dotted vessels, shiny white streaks and focal brown areas. Whitish-grey areas on dermoscopy correspond to granuloma in the dermis, these granulomas push the dermal vessels up leading to prominence of linear vessels, shiny white streaks correspond to fibrosis in deep dermis and focal brown areas to hemosiderin deposition.[4-7] Rosettes could be due to ongoing inflammation as seen in our case in the lesional tissue.

Differential diagnosis includes sarcoidosis, angiolymphoid hyperplasia and eosinophilia, pseudolymphoma, persistent arthropod bite reaction, tumid lupus erythematosus, leprosy, and granulomatous rosacea. These all conditions are differentiated with the help of histopathology.[1]

As granuloma faciale has facial lesions, treatment is always desired. Intralesional triamcinolone suspension at 2.5–5 mg/dL as first line therapeutic option. Other options are topical or oral dapsone (50–150 mg daily) and oral clofazimine 300 mg daily. For multiple lesions, hydroxychloroquine can be given.[8]

Surgical excision, cryosurgery, dermabrasion, electrosurgery, and carbon dioxide or pulsed dye laser have been advised.[1]

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Conflicts of interest

There are no conflicts of interest.

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