Enigmatous Hyperpigmented Plaques on Back

An 86-year-old male presented with a 6-month history of sudden onset eruption of multiple dark itchy plaques. They were initially over his back, which then progressed to involve his trunk, hands, and thighs. He had no symptoms of photosensitivity, mucosal lesions, joint pain, prior genital ulcer, or significant weight loss. He was a diabetic and was well controlled on metformin and glimepiride.

Clinical examination revealed multiple hyperpigmented atrophic plaques with slightly elevated borders over his back. These were discrete (1 × 1 cm) at few places and coalescing at others [Figure 1a]. There were multiple yellowish hyperkeratotic papules over his palms, which were painless and not localized over pressure points or palmar creases. A few also had a cigarette paper-like peripheral circumferential scale [Figure 1b]. His nails and mucosa were normal. Dermoscopy was performed on his palm with Heine delta 20 plus in nonpolarized mode at 10 × magnification. It showed the presence of erythematous globules. Few areas were orangish in appearance, and there were linear vessels at the periphery. Also, there were foci of pearly white areas [Figure 2a]. We hence decided to biopsy the lesion, with the possibilities of lichen planus, lichenoid drug eruption, subacute cutaneous lupus erythematosus, secondary syphilis, and porokeratosis.

Histology revealed orthokeratotic hyperkeratosis with foci of hypergranulosis. There was an absence of coronoid lamella, parakeratosis, epidermal atrophy, and appendage loss. There was a moderately dense lymphocytic infiltrate at the dermo-epidermal junction with extensive basal cell degeneration. The occasional presence of melanin incontinence and melanophages was noted. Eosinophilic apoptotic Civatte bodies in the papillary dermis were present, with an absence of eosinophils and plasma cells in the infiltrate. Dermal vessels showed no evidence of endothelial cell swelling [Figure 2b]. Direct immunofluorescence showed the presence of focal globular C3 and IgG in the papillary dermis [Figure 2b]. Hence, a diagnosis of lichen planus was made, and he was given topical corticosteroids, emollients, and antihistamines with which there was 60% improvement in his lesions.

The clinical appearance of hyperpigmented lesions with lichenoid borders made us think of the possibility of lichen planus, lichenoid drug reaction, subacute cutaneous lupus erythematosus, and porokeratosis. The coppery brown nature of pigmentation and presence of waxy papules with peripheral scaling on the palms made us consider secondary syphilis also as a possibility. Sulphonyl urea drugs are known to cause a lichenoid drug eruption. This mimics idiopathic lichen planus and presents as pruritic, polygonal plaques.[1] However, these usually arise within 1 year of intake of the eliciting drug, lack Wickham's striae, and are often photo-distributed. The biopsy in the drug eruption would show areas of parakeratosis and a mixed infiltrate with eosinophils.[2] Subacute cutaneous lupus erythematosus can present as annular lesions or as psoriasiform plaques. It would have an earlier age of onset, photosensitivity, photo-distributed lesions, and ANA positivity. Porokeratosis often presents with a thready border. However, a biopsy would have revealed the presence of columns of parakeratosis with an underlying diminished granular layer.[3] Thus, the classical histopathological features of orthokeratotic hyperkeratosis, wedge-shaped hypergranulosis, presence of Civatte bodies, lymphocytic interface dermatitis, and globular C3/IgG deposits helped us confirm our diagnosis of lichen planus, hence setting in stone the paramountcy of histopathology whenever a clinical enigma exists.

Financial support and sponsorship

Nil.

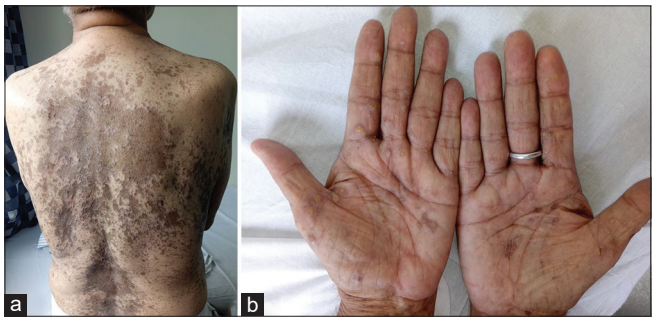

Figure 1: (a) Hyperpigmented plaques over the trunk, few discrete, and few coalescing with peripheral lichenoid border. (b) Yellowish hyperkeratotic papules with peripheral scaling on palms

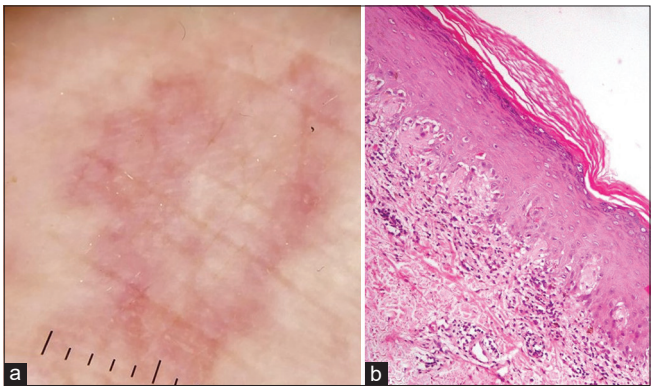

Figure 2: (a) Dermoscopy showing the presence of erythematous globules with few orangish areas, linear vessels at periphery with foci of pearly white areas (Hiene Delta, 10×, nonpolarized). (b) Skin biopsy shows orthokeratotic hyperkeratosis, irregular acanthosis, hypergranulosis, lymphocytic interface change, and few apoptotic keratinocytes (hematoxylin and eosin, ×200)

Conflicts of interest

There are no conflicts of interest.

Vignesh Narayan R, Anuradha Bishnoi, Debajyoti Chatterjee[1], Muthu Sendhil Kumaran

Departments of Dermatology, Venereology and Leprology and [1]Histopathology, Postgraduate Institute of Medical Education and Research, Chandigarh, India

Address for correspondence:
Dr. Muthu Sendhil Kumaran, Department of Dermatology, Venereology and Leprology, Post Graduate Institute of Medical Education and Research, Sector 12, Chandigarh - 160 012, India.
E-mail: drsen_2000@yahoo.com

References

1. Noakes R. Lichenoid drug eruption as a result of the recently released sulfonylurea glimepiride. Australas J Dermatol 2003;44:302-3.
2. Gupta L, Kumar R. Lichen planus versus lichenoid drug reaction. Indian J Drugs Dermatol 2015;1:44-5.
3. Sehgal VN, Jain S, Singh N. Porokeratosis. J Dermatol 1996;23:517-25.

Access this article online

Website: www.idoj.in

DOI: 10.4103/idoj.IDOJ_273_21

Quick Response Code

How to cite this article: Narayan RV, Bishnoi A, Chatterjee D, Kumaran MS. Enigmatous hyperpigmented plaques on back. Indian Dermatol Online J 2022;13:275-6.

Received: 30-Apr-2021. **Revised:** 18-Oct-2021.
Accepted: 03-Nov-2021. **Published:** 03-Mar-2022.