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PhotoDermDiagnosis

Keratotic papules over chest and back

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A 56-year-old male presented with multiple itchy papules over chest and back for 3 months. There was no history of intake of drug prior to onset of lesions. To start with few hyperpigmented papules appeared over chest. Over the time, new lesions appeared and involved both chest and back.

On examination multiple grouped hyperpigmented keratotic papules were found on chest and back (**Figure 1)**. Most of the lesions were 5-6 mm in size (few were smaller 2-3 mm) and were discrete. Many of the papules had central pit-like depression. Scalp, mucosa, hair, nails, palm and soles were unaffected. However, one hyperpigmented patch 3cm X 2cm was found on left temporal region

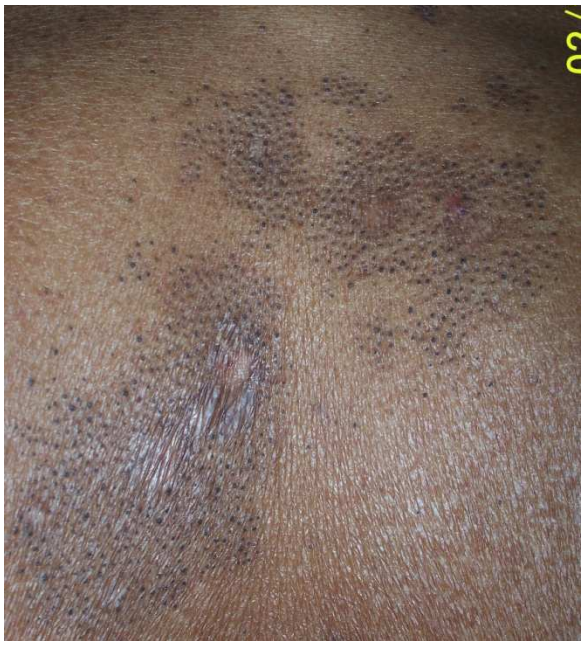

Figure 1

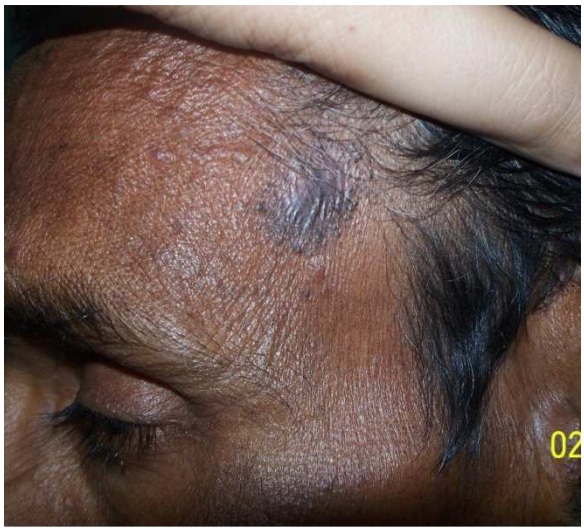

Figure 2

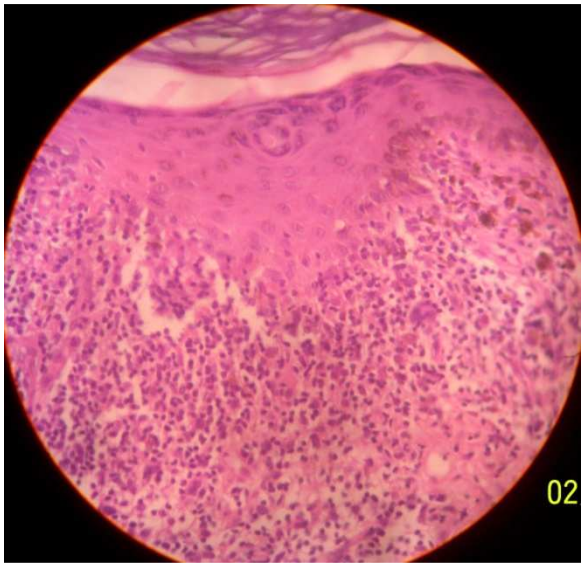

Figure 3 Histopathology (H&E stain X40).

(**Figure 2**). It was surrounded by similar hyperpigmented keratotic papules as seen over chest or back. Histopathological picture is shown in **Figure 3** (H&E stain X40).

What is your diagnosis?

Diagnosis

Lichen planus

Discussion

Lichen planus (LP) and its variants are characterized histologically by band-like lymphocytic infiltration of upper dermis along with vacuolar alteration of the basal layer and wedge-shaped hypergranulosis.[1] Follicular lichen planus (FLP), also known as lichen planopilaris, was first described by Pringle in 1895 and is widely accepted as folliculotropic variant of LP.[1,2] FLP may be seen alone or in association with cutaneous or mucosal LP.[3] In our experience most of FLP has been seen in association with cutaneous LP, mostly hypertrophic LP or classical LP. It may as well be a part of Graham-Little-Piccardi-Lassueur syndrome (triad of FLP of skin and/or scalp, multifocal scarring alopecia of scalp and nonscarring alopecia of axillary and pubic areas).[3]

It is more frequently seen in females and is clinically characterized by follicular violaceous keratotic papules over scalp (more common),[1] trunk and medial side of proximal extremities.[3,4] It is considered an important cause of cicatricial alopecia of scalp and perifollicular erythema at the periphery of lesion is an important diagnostic clue. Sometimes, individual papules may coalesce to form a keratotic plaque.[5] Recently, a linear variant of FLP following Blaschko's line has been reported.[6] Little is known about the course of this condition but the inflammatory process may cause loss of follicular structure and hence cicatricial alopecia.

Common differential diagnoses of FLP include keratosis pilaris, Darier's disease, follicular mucinosis and lichen scrofulosorum. Thorough mucocutaneous examination often helps in arriving at the diagnosis. Presence of other forms of cutaneous and/or mucosal LP is highly suggestive. In the scalp, it must be distinguished from other causes of scarring alopecia especially discoid lupus erythematosus. Often the lesions of FLP can be found at the periphery of scarring alopecia and perifollicular erythema or narrow violaceous rim is highly suggestive of FLP.[1,4]

Histopathology can be quite useful in doubtful cases. Early lesions show perifollicular dense lymphocytic infiltrate at the level of infundibulum and isthmus, sparing lower segment of hair follicle. In addition, orthokeratosis, follicular plugging, wedge-shaped hypergranulosis of the infundibulum, vacuolar changes of the basal layer of the outer root sheath and necrotic keratinocytes are seen. Interfollicular epidermis is usually spared but may be involved occasionally.[1] Advanced lesions show perifollicular fibrosis and epithelial atrophy at the level of the infundibulum and isthmus, giving rise to an hourglass appearance. Ultimately, hair follicle is replaced by vertically oriented fibrotic tracts containing clumps of degenerated elastic fibers. The findings in FLP lesions over glabrous skin are slightly different. Perifollicular fibrosis is minimal and hence there is no scarring.

Our case presented with itchy grouped violaceous keratotic papules over trunk and back. On examination, one hyperpigmented plaque was found over left temporal region. Considering these clinical findings, diagnosis of follicular lichen planus was made. Histological findings of papule did not support its follicular origin; rather it was classical for LP. No folliculocentric inflammation was noticed, even in repeated sections. Hyperkeratosis, irregular acanthosis, wedge- shaped hypergranulosis, focal vacuolar change of the basal layer and

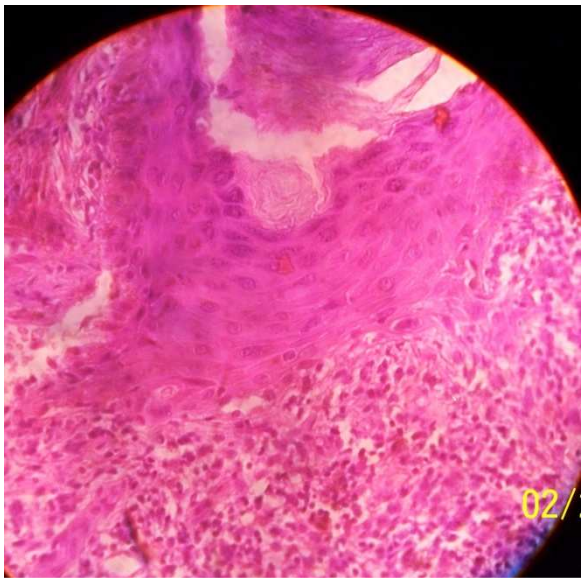

Figure 4 Delling in epidermis.

band-like lymphocytic infiltration of upper dermis were noted. Such presentation is uncommon for LP. Based on classic histopathological findings diagnosis of LP was made. Our case was unique in presenting as keratotic papules and mimicking FLP.

One interesting histopathological finding in our case was 'Delling' (**Figure 4**). It refers to depression of surface epidermis not related to opening of sweat duct or pilosebaceous duct and is filled with keratin and pinkish exudates. It has been classically described in lichen sclerosus et atrophicus and systemic lupus erythematous. Prasad *et al*.[7] has described it as a prominent finding in pityriasis rosea too. As yet it has not been reported in LP and hence its significance in LP is unknown. However, it explains central pit seen clinically in many papules in our patient.

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