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KEY WORDS: Disseminated DLE, Verrucous Psoriasis, Prurigo Nodularis, Keratoacanthoma, Tuberculosis Verrucosa Cutis, Deep Fungal Infections

DIVERGENT VERRUCOUS PRESENTATIONS – UNANTICIPATED HISTOPATHOLOGICAL DISCOVERY

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ABSTRACT

Verrucous presentation of common dermatological disorders is a rare entity. Herein we report three such presentations. One is a verrucous variant of disseminated DLE, the second is verrucous psoriasis, and the other is prurigo nodularis, rare clinico-histopathological variants. They can be misdiagnosed for other closely mimicking conditions like Keratoacanthoma, Tuberculosis verrucosa cutis, and deep fungal infections.

1. INTRODUCTION:

Hypertrophic or verrucous DLE (hypertrophic L.E.) is a unique subset in which unusual lesions occur. The thick, adherent scale is replaced by massive hyperkeratosis, the lesions look like warts or squamous cell carcinomas[1]. Verrucous psoriasis (V.P.) is a rare variant of psoriasis characterized by hyperkeratotic, papillomatous plaques that clinically resemble verrucous carcinoma (V.C.) in lesion appearance and distribution. It is amenable to medical treatments[2]. Prurigo nodularis is a group of skin diseases characterized by intensely pruritic papules or nodules[3].

2. CASE SERIES

CASE 1:

A 60year old male came with dark-colored elevated lesions all over the body from 6 months associated with itching and pain. History of knee joint pains on both sides from 4 months. No history of photosensitivity and mucosal lesions. Known case of CKD since one year and on regular treatment. On examination, Multiple, well defined, verrucous plaques of varying sizes from 1x3 to 7x5 cms with central depigmentation and a peripheral hyperpigmented border over both the elbows, trunk extensor, and flexor aspects of both upper and lower limbs. (figure1,2,3,4) The differential diagnosis being Keratoacanthoma, Tuberculosis verrucosa cutis, Deep fungal infections. Investigations like complete blood count, complete urine examination, liver function tests were normal, and serum creatinine was raised.

Figure 1

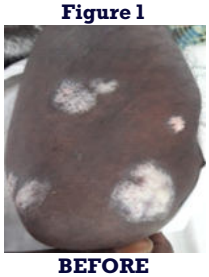

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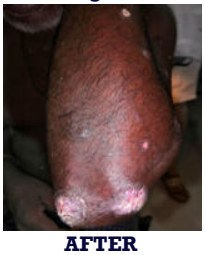
Figure 2



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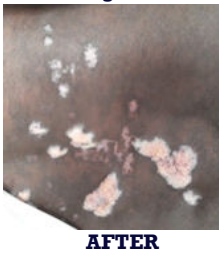

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Histopathological findings show follicular infundibula dilatation and plugged by compact orthokeratotic corneocytes. Dense infiltrate around hyperplastic appendages and encroaches upon them, obscuring the DEJ, occasional colloid bodies seen. Moderately dense superficial perivascular lymphocytic infiltrate. Irregular epidermal hyperplasia centered around follicular infundibula and acrosyringia (figure5). Features were suggestive of HYPERTROPHIC DISCOID LUPUS ERYTHEMATOSUS(DLE). The patient is treated with Emollients, Topical clobetasol propionate 0.05% ointment, Antihistamines and followed for four weeks.

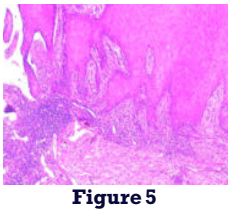

Figure 5

Case 2:

Figure 6

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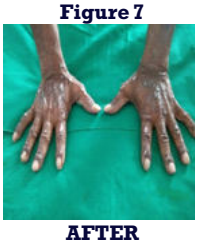
Figure 7



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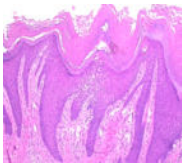

Figure 8

A 56-year-old male came with dark-colored raised lesions over hands and legs from 5 years associated with itching. History of knee joint pains on both sides from 2 months. No history of winter exacerbation of lesions. No history of photosensitivity and atopy. On examination, multiple well defined hyperpigmented verrucous plaques of varying sizes from 1x1 cms to 4x3 cms with central depigmentation and crusting present over the v area of the neck, posterior trunk, extensor, and flexor aspects of both upper and lower limbs, including dorsum of hands, foot and Subungual hyperkeratosis of fingernails is seen (figure 6,7). The differential diagnosis is Hypertrophic DLE, Prurigo nodularis, Hypertrophic lichen planus, Lichen simplex chronicus, and atopic dermatitis. Routine investigations were normal. Histopathological findings showed the Granular layer focally thickened, and the stratum corneum shows compact ortho hyperkeratosis with foci of parakeratosis. Moderate papillomatosis is present. The epidermis shows marked psoriasiform hyperplasia and focal spongiosis. Moderately dense superficial perivascular lymphohistiocytic infiltrate with marked papillary dermal hyperplasia. The papillary dermis shows dilated tortuous capillaries and thickened collagen bundles perpendicular to the surface(figure 8). Features suggestive of VERRUCOUS PSORIASIS. The patient is treated with Tab Methotrexate 7.5 mg once a week, Topical clobetasol propionate 0.05% ointment, Antihistamines and followed for four weeks.

Case 3

A 6-year-old female child came with dark-colored lesions over the right leg from one month associated with pain and blood discharge. No history of atopy. On examination, verrucous papules and plaques of sizes from 0.5 x0.5 cms to 3x3 cms oozing over the posterior aspect of the lower one-third of the right leg(figure 9). Histopathological findings show the granular layer is thickened and the stratum corneum shows marked compact orthokeratosis. Sparse superficial perivascular infiltrate of lymphocytes and eosinophils with mild to moderate, irregular epidermal hyperplasia and spongiosis. The papillary dermis is thickened with papillomatosis and Showed thickened bundles of collagen in a vertical array. The capillaries in the papillary dermis are increased in number and are thick-walled. Features suggestive of Prurigo Nodularis. The patient was treated with Systemic antibiotics for one week and Topical Mometasone (0.1%) and fusidic acid (2%) for two weeks(figure10).

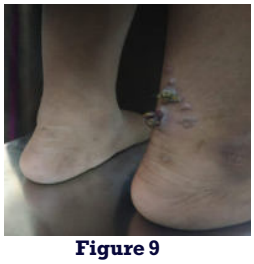

Figure 9
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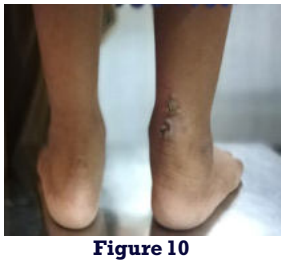

Figure 10
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3.DISCUSSION

Hypertrophic DLE is characterized clinically by hypertrophic verrucous plaques with indurated borders and minimal scaling. Some show atrophy, follicular plugging frequently reported on extensors of forearms, face, and upper part of trunk[4]. Histopathologically shows all classical features of interface dermatitis. Apart from HCQ, intralesional triamcinolone, isotretinoin, thalidomide, and acitretin are other options available[5]. Verrucous psoriasis is a rare form of psoriasis, which shares overlapping features with other common diseases[6]. The Histological examination shows features that are common to both verruca Vulgaris and psoriasis[7]. Lesions such as prurigo nodularis or lichen simplex chronicus may also become confused with Verrucous psoriasis. Still, those entities often have a patterned response occurring secondary to repeated, often self-inflicted irritation and subsequent trauma. It is believed that oral Etretinate was effective due to the pronounced hyperkeratosis in those lesions.

4. CONCLUSION:

We are now reporting to create awareness about the probable clinical presentations of the rare variants of Cutaneous lupus erythematosus, psoriasis, and Prurigo nodularis due to its diagnostic dilemma, which may be misdiagnosed, and to account for them into consideration while approaching clinical diagnosis, which can be minimized by clinician's vigilance and appropriate histopathological correlation.

5.SOURCE OF FUNDING

None

6.CONFLICTS OF INTEREST

None

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