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Case Report

Successional occurrence of two papulosquamous disorders in HIV positive patient: a rare case report

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ABSTRACT

Presentation of two papulosquamous disorders in a same individual is rare condition till date. Independently, psoriasis and Lichen planus (LP) are common inflammatory skin conditions affecting around 2-3% and 1% of HIV (Human immune deficiency) positive population respectively. As reviewed in the literature, psoriasis may be independently associated with other autoimmune conditions like vitiligo, alopecia areata, lichen planus, and discoid lupus erythematosus. In this article, we presented a case report of a HIV seropositive patient who suffered from psoriasis and lichen planus. The coexistence of psoriasis and lichen planus in one individual is rare and underreported in literature. Psoriasis or lichen planus may be the presenting feature of HIV infection and tends to be more severe, to have atypical presentations. Psoriasis and lichen planus can be coexistent or successionally appear one after other in one individual though rare presentation. High index of suspicion is always required while dealing with papulosquamous lesions in PLHIV.

Keywords: Psoriasis, Lichen planus, HIV

INTRODUCTION

Two papulosquamous disorders in one patient is quiet rare combination in context of HIV seropositivity. Psoriasis and lichen planus act as presenting feature of HIV independently. Atypical forms of papulosquamous diseases in HIV seropositive individuals may lead to confusion while diagnosing and treating the condition.[1] We reported a rare case of lichen planus and psoriasis presentation in successional manner in PLHIV individual.

CASE REPORT

A 47 years old HIV positive male who presented with complains of itchy scaly thick lesions over elbows, lower limbs, palms, soles and scalp since 1 month (Figure 1). On cutaneous examination multiple thick scaly plaques over erythematous base were distributed in a bilaterally symmetrical pattern over extensor aspect of upper and lower extremities, palms, soles, dorsal aspect of hands and feet as well as scalp. He was on HAART (highly active retroviral therapy) (tenofovir 300 mg; lamivudine 300 mg and dolutegravir 50 mg) since7 years.

Considering the morphology of lesions, a provisional differential diagnosis of palmoplantar psoriasis, lichen planus, Reiter's disease and secondary syphilis were considered. With these differentials in mind, we proceeded with skin biopsy from elbow plaque, routine laboratory investigations and CD4 count assessment. Absence of mucosal lesions ruled out Reiter's disease.

We also evaluated his VDRL titre, TPHA, manteaux test and chest X-ray to rule out infectious aetiologies. Laboratory parameters, X-ray chest, were within normal range, VDRL and TPHA were nonreactive.

Histopathologically, a diagnosis of plaque type psoriasis was confirmed (Figure 2). We advised patient to continue his HAART and simultaneously started patient on tab apremilast 30 mg bd and emollients. Currently, patient was tolerating the drug well and is under monthly follow up. We retrieve data from electronic patient record system, when patient reported to us with itchy violaceous plaques over upper and lower extremities and back. Skin punch biopsy was taken from lesion over back. On histopathology we get hyperkeratinised stratified squamous epithelium showing parakeratosis irregular broadened thickened rete ridges. Superficial dermis shows dense perivascular lymphocytic infiltrate findings suggestive of lichen planus (Figure 3). Patient was treated with topical steroids and antihistamines with good results. Many autoimmune skin disorders may appear sequentially or may coexist due to altered immune mechanisms in HIV seropositive individuals.

Figure 1: Thick hyperkeratotic scaly plaques over bilateral palms and soles and elbow.

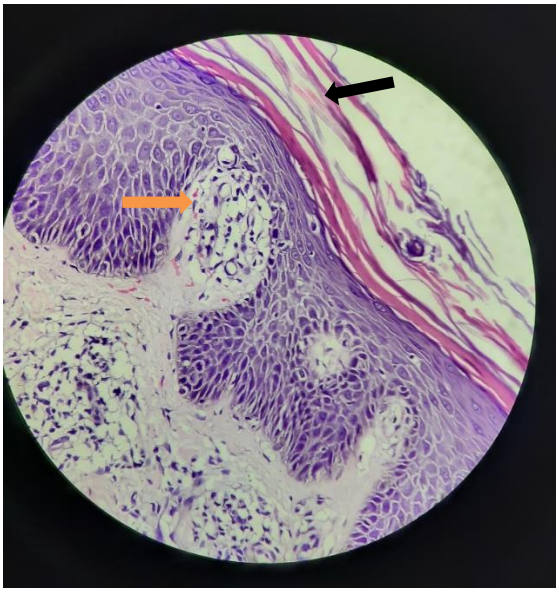

Figure 2: H and E at 40x epidermis shows hyperkeratosis (black arrow) with focal collection of neutrophils (Munro's microabsces) (yellow arrow). Thin and focally absent granular layer with elongated rete ridges (black arrow).

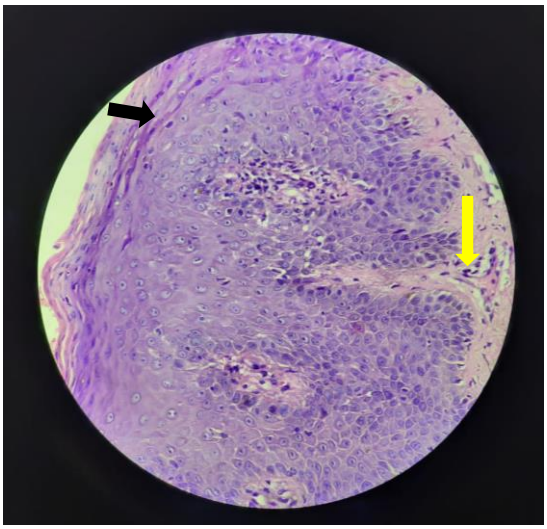

Figure 3: H and E at 40x- hyperkeratinised stratified squamous epithelium showing parakeratosis irregular broadened thickened rete ridge (black arrow). Superficial dermis shows dense perivascular lymphocytic infiltrate (yellow arrow), findings suggestive of lichen planus.

DISCUSSION

Psoriasis affects 2-3% and LP affects 1% HIV positive population.[1] However, the existence of both diseases in same individual is underreported till date. Psoriasis in a seropositive patient is known for its variation in clinical features and severity of skin involvement. Very few case reports are recorded in literature illustrating the occurrence of psoriasis in a HIV positive patient. Our

case is one of them.[2] Several such case reports have been published demonstrating existence of skin diseases with altered immunological roles in seropositive patients.[2,3] Altered cytokines, autoimmunity, and koebner phenomenon have been implicated as pathogenic factors connecting these two entities. Concurrent activation of both CD4+ and CD8+ has been hypothesized in such co-occurrence in addition to upregulation of proinflammatory molecules such as TNF-α, INF-α, IL-1, IL-6, IL-22, IL-23, and nuclear factor kappa-light-chain-enhancer of activated B-cells (NF-kβ).[1]

LP is an idiopathic T-cell mediated chronic papulosquamous condition without a clear autoantigen.[1] There are few case reports of lichen planus in a HIV seropositive individual.[3] LP has been reported to occur in immunocompromised hosts such as patients with graft versus host disease and abnormal humoral immunity, however, there are only 5 case reports of hypertrophic lichen planus occurring in AIDS patient.[4-7]

Papulosquamous forms of secondary syphilis might clinically and histologically resemble psoriasis and can be distinguished by other clinical features of syphilis, and positive syphilis serology.[8] In our case secondary syphilis is ruled out with negative serology and other clinical features.

Sandhu et al have reported a co-occurrence of lichen planus and psoriasis in a child with HIV seropositivity.[1] Our case was similar to the above reported case except for the fact that in our case, patient had developed lichen planus two years back which settled down but developed chronic plaque type psoriasis over the period of time. For that, reaching an appropriate clinical and histopathological diagnosis is of utmost importance.

Limitation

This important to identify the disease in this era where targeted treatment modalities are available though we have not thrown much light on treatment part in this case report.

CONCLUSION

A high index of suspicion is needed in HIV positive patients presenting with papulosquamous lesions. A detailed clinical, histopathological examination is mandatory in each and every patient with HIV seropositivity who presents with papulosquamous itchy lesions over body. Nevertheless, rare occurrence of psoriasis or lichen planus in PLHIV.

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REFERENCES

1. Sandhu S, Sinha P, Shelly D, Bhatt S. A Rare Presentation of Concurrent Onset and Coexistence of Generalized Lichen Planus and Psoriasis in a Child. Indian Dermatol Online J. 2020;11(4):616-8.
2. Queirós N, Torres T. HIV-Associated Psoriasis. Actas Dermosifiliogr. 2018;109(4):303-11.
3. Morar N, Owen SA, Maurer T, Bunker CB. HIV-associated psoriasis: pathogenesis, clinical features, and management. Lancet Infect Dis. 2010;10(7):470-8.
4. Kiluk P, Flisiak I. The coexistence of oral lichen planus and psoriasis vulgaris–a case report. Dermatol Rev. 2016;103(2):119-23.
5. Rippis GE, Becker B, Scott G. Hypertrophic lichen planus in three HIV-positive patients: a histologic and immunological study. J Cutan Pathol. 1994;21(1):52-8.
6. Fitzgerald E, Purcell SM, Goldman HM. Photodistributed hypertrophic lichen planus in association with acquired immunodeficiency syndrome: a distinct entity. Cutis. 1995;55(2):109-11.
7. Pardo RJ, Kerdel FA. Hypertrophic lichen planus and light sensitivity in an HIV-positive patient. Int J Dermatol. 1988;27(9):642-4.
8. Bittencourt MJ, Brito AC, Nascimento BA, Carvalho AH, Nascimento MD. A case of secondary syphilis mimicking palmoplantar psoriasis in HIV infected patient. An Bras Dermatol. 2015;90(3):216-9.
9. Emadi SN, Mogaddam J, Yousefi M, Sobhani B, Moshkforoush A, Emadi SE. Extensive hypertrophic lichen planus in an HIV positive patient. Dermatol Online J. 2010;16(6):8.
10. Fife DJ, Waller JM, Jeffes EW, Koo JY. Unraveling the paradoxes of HIV-associated psoriasis: a review of T-cell subsets and cytokine profiles. Dermatol Online J. 2007;13(2):4.

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