

## Manifestation of an undiagnosed HIV infection

The prevalence of psoriasis in HIV disease has been reported to be the same as that in the general population, occurring in approximately 1–3% of HIV-positive individuals.<sup>1,2</sup>

The behavior of psoriasis in HIV disease is of interest, in terms of pathogenesis and therapy because of the background of profound immunodysregulation. It is paradoxical that, while drugs that target T lymphocytes are effective in psoriasis, the condition should be exacerbated by HIV infection. The etiopathogenesis of psoriasis is unknown, but genetic and environmental factors are thought to be involved.

The occurrence may be correlated with an increase in CD8+ T cells in the peripheral blood, reflecting the psoriasis relapses in immunocompetent patients due to a significant infiltration of CD8+ T cells both in the epidermis and dermis of lesional skin.<sup>3</sup>

The clinical manifestations of psoriasis that are observed in HIV-infected individuals are similar to those in non-HIV-infected individuals with some variations, but the clinical behavior of psoriasis seems to be altered among immunosuppressed patients. In particular, clinical observations demonstrate that HIV-affected psoriatic patients have a severe and prolonged clinical course with more frequent exacerbations, and that the development of skin lesions or arthritis symptoms in untreated HIV patients is associated with a poor prognosis and a mean survival expectancy ranging from 4 to 24 months after psoriasis onset.<sup>4-6</sup>

We present the case of severe psoriasis associated with an undiagnosed HIV infection that was found to be resistant to multiple antipsoriatic therapies. Diagnosis and treatment of HIV led to an improvement of the skin condition.

A 41 year old man, Caucasian, since 2015, presented with severe erythematous, scaly plaques towards extensor surfaces, scalp, thighs and genitals, associated nails dystrophy (Figure 1.). He presented no articular symptoms.

Despite multiple observations and medications, we persisted unresponsive to antipsoriatic therapeutics with topic and systemic steroids and also methotrexate.

As a screening for biological, he was tested for HIV, which revealed positive with a viral load 48, 000 copies/ml and CD4 T count 19 cells/mm<sup>3</sup>. Thus antiretroviral was initiated with darunavir (800mg/day), ritonavir (100mg/day, emtricitabine/tenofovir (200/300mg day).

Gradually, psoriatic lesions improved as, the viral load was depleted and lymphocytes count increase. After 4 weeks of antiretroviral treatment, psoriasis had almost resolved (Figure 2.) with a viral load count decreasing to 154 copies/ml and a CD4 T count 43 cell/mm<sup>3</sup>.

As patients with HIV infection often present with more severe clinical manifestations than non-HIV patients, psoriasis ther-

Figure 1 (A-B). Erythematous, scaly plaques towards extensor surfaces of hands prior ART.



Figure 2 (A-B). After 4 months of ART with solving lesions.



apies show to difficult and challenging. Some patients have pre-existing psoriasis that can undergo severe exacerbation with progression of immunodeficiency to AIDS, whereas others can present as a manifestation of latent, undiagnosed HIV infection, which might trigger psoriasis. This case emphasizes the importance of clinical suspicion of a latent HIV infection in patients with a multi drug resistance and also a strict adherence to ART that represent a cornerstone to psoriasis treatment.

### References

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### Diagnosis: Psoriasis as a manifestation of an undiagnosed HIV infection.

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