

Generalized Severe Plaque Psoriasis in an HIV Positive Patient – a Challenging Treatment

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ABSTRACT

Psoriasis is a systemic chronic immune-mediated disorder, rarely reported in HIV-infected patients, in which the disease is more severe and debilitating. Response to treatment is modest, and skin diseases may profoundly affect the patients' quality of life. Anti-psoriasis therapies have immunosuppressive effects and must be carefully recommended in HIV-infected patients. Moreover, the compliance of HIV patients diagnosed with psoriasis is low, and monitoring these patients is challenging. Herein we present a rare case of severe HIV-associated psoriasis with large plaques localized on the trunk, abdomen, limbs and plantar area in a non-compliant patient, with impaired renal and hepatic functions, dyslipidemia, and anemia, for whom the therapeutic approach was disappointing.

Keywords: human immunodeficiency virus (HIV), psoriasis

INTRODUCTION

Psoriasis is a systemic chronic immune-mediated disease, characterized by abnormal maturation of keratinocytes, rarely reported in human immunodeficiency virus (HIV)-infected patients (but not more commonly reported in HIV infection than in the general population), in which the disease is more severe and debilitating.¹ Subjects with psoriasis and HIV infection frequently have more severe forms, and attention to monitoring both diseases is required.

The management of HIV-associated psoriasis is challenging due to contraindications and/or toxicity of systemic drugs usually used to treat psoriasis, due to the association of antiretroviral therapy, and also because of the lack of compliance of patients.

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FIGURE 1. A, B, C — plaque-psoriasis involving trunk, abdomen and limbs; D — plantar psoriasis

Here we report a case of a severe cutaneous psoriasis in a non-compliant HIV-infected patient, in which the failure of topical treatment highlights the difficulties that emerge in such cases.

CASE REPORT

A 58-year-old man diagnosed as HIV-positive, monitored and treated with antiretroviral therapy in the Infectious Diseases Hospital for 10 years, was referred to the Dermatology Department for generalized plaque psoriasis and severe pruritus. The diagnosis of psoriasis was initially established during childhood; no family history of psoriasis was revealed, but smoking and alcohol consumption were declared. Topical steroid treatment had been used constantly in the last 4 decades, with minor improvement in the last years. The aggravation of skin lesions has been noted for 6 months prior to presentation, with no response to antihistamines or topical steroids.

Upon admission, plaque psoriasis was confirmed, with the lesions covering more than 75% of the skin surface, in association with excoriations induced by scratching, intense xerosis, and numerous senile angiomas distributed all over the trunk and limbs (Figure 1 panels A–D). Psoriatic arthritis and nail psoriasis were not observed.

Laboratory test results revealed a white blood cells count of $3,800/\text{mm}^3$ (neutrophils, 56%; lymphocytes, 30%; monocytes, 10%; eosinophils, 4%); hemoglobin, 10.5 g/dL; platelets, $375,000/\text{mm}^3$; aspartate aminotransferase, 67 IU/L; alanine aminotransferase, 110 IU/L; alkaline phosphatase, 90 IU/L; total protein, 6.8 g/dL; albumin, 3.5 g/dL; blood urea nitrogen, 44 mg/dL; creatinine, 1.8 mg/dL; total cholesterol, 274 mg/dL; triglyceride, 780 mg/dL. Serology was negative for anti-hepatitis B virus and anti-hepatitis C virus antibodies. CD4 T-cell count was $34/\text{mm}^3$, and HIV RNA was 1.40×10^5 copies/mL.

In view of the patient's clinical signs, his medical history, and laboratory evaluations, systemic drugs could not be

administered due to impaired renal and hepatic functions, dyslipidemia and anemia. Immunosuppressive therapy was out of the question; the patient declared no improvement after topical calcipotriol 0.005% associated with emollients applied for 3 weeks prior to the consultation. A short cure of daily application of 5% coal tar and 3% salicylic was prescribed for 4 weeks at a Psoriasis Area and Severity Index (PASI) of 40, followed by slight improvement of the skin lesions; PASI became 28 after 4 weeks of treatment. The patient was not followed-up for the next months due to his refusal to continue dermatological treatment and surveillance. The patient agreed to the publication of his data and the institution where the patient had been admitted, approved the publication of the case.

DISCUSSION

Psoriasis is considered a primary disease within dermatologic manifestations in people living with HIV/AIDS, and the prevalence of psoriasis among people infected with HIV is approximately 1–4%.² HIV-positive subjects with psoriasis present with more extensive, severe, acral forms, and treatment is challenging, when putting into balance potential risks and benefits, as well as adverse reactions.³ Close monitoring of the patient is mandatory, and collaboration with the infectious disease specialist is essential. Local therapy is the first-line recommended treatment, phototherapy and oral retinoids could be tried with cautions in moderate to severe forms; cyclosporine, methotrexate, hydroxyurea, and tumor necrosis factor- α inhibitors are the last option in severe forms that are refractory to all previous medications.⁴ Apart from dermatological therapy, patients with moderate and severe HIV-associated psoriasis improve with highly active antiretroviral therapy.⁵

HIV-associated psoriasis has a great negative impact on the individual's quality of life due to intense pruritus and problems raised by adapting the therapy. Coal tar is one of the first therapies for psoriasis, based on anti-inflam-

matory, antibacterial, antipruritic, and antimitotic effects, although adverse reactions have been frequently reported: folliculitis, irritation, and contact eczema. It has been used for many years as a topical option in moderate-severe forms of plaque-psoriasis as a unique method or as Goeckerman therapy (daily application of crude coal tar followed by phototherapy). It has recently decreased in recommendation for suspected mutagenic/carcinogenic effects.⁶

However, in the present case of a non-compliant HIV-positive patient with severe psoriasis, with impaired renal and hepatic functions, dyslipidemia and anemia, a topical treatment with coal-tar was started, followed by improvement of skin lesions on short term.

CONCLUSION

HIV-associated psoriasis is a difficult clinical condition that requires careful treatment choice.

CONFLICT OF INTEREST

Nothing to declare.

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