

Human Immunodeficiency Virus Infection in a Hepatitis B Virus–Positive Psoriasis Patient Treated With Ustekinumab

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PRACTICE POINTS

- Psoriasis in patients with human immunodeficiency virus (HIV) tends to be more resistant to conventional therapies.
- Experience is limited in the use of immunosuppressants and biologics to treat psoriasis in HIV patients.
- Maintaining antiretroviral therapy and prophylaxis against opportunist disease is important in HIV patients who receive biologics, as is close monitoring of the viral load.

To the Editor:

The incidence of psoriasis in human immunodeficiency virus (HIV)–infected patients is similar to the general population, but it usually becomes more severe as immunosuppression increases. Additionally, it tends to be more resistant to conventional therapies, and the incidence and severity of psoriatic arthropathy is increased. Psoriasis often worsens at the time of HIV primary infection.¹ We describe a case of a patient with hepatitis B virus (HBV) whose severe plaque psoriasis was controlled on ustekinumab; he was later diagnosed with HIV infection.

A 42-year-old man with HBV treated with entecavir (HBV DNA viral load, <20 copies/mL [inactive carrier, <2000 copies/mL]) presented to our dermatology unit with severe plaque psoriasis (psoriasis area and

severity index 23) that caused notable psychologic difficulties such as anxiety and depression. Treatment was attempted with cyclosporine; acitretin; psoralen plus UVA; infliximab; adalimumab; and eventually ustekinumab (45 mg every 3 months), which controlled the condition well (psoriasis area and severity index 0) in an almost completely sustained manner.

Serologic tests requested at one of his analytical control appointments 2 years after initiating treatment with ustekinumab revealed he was HIV positive. The patient reported unprotected sexual intercourse 4 months prior. He was referred to the infectious disease unit and was classified in subtype A1 of HIV infection (CD4 count, 583 cells/μL [reference range, 500–1200 cells/μL]; viral load, 159,268 copies/mL [rapid progression to AIDS, >100,000 copies/mL]). Treatment was initiated with raltegravir, ritonavir, darunavir, and abacavir; tolerance was suitable. Because of the patient's history of severe psoriasis, treatment with ustekinumab was maintained. Normally, treatment with this drug would be contraindicated in patients with HIV, as it can lead to viral reactivation. Four years after his HIV diagnosis, neither the patient's cutaneous nor HIV-associated condition had worsened.

For patients with HIV and mild or moderate psoriasis, topical therapies (eg, corticosteroids, vitamin D analogues, tazarotene) are recommended, similar to patients who are HIV negative. Human immunodeficiency virus–positive patients with severe psoriasis who do not respond to topical treatment should receive phototherapy (UVB or

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psoralen plus UVA) or acitretin along with their antiretroviral drugs.² In refractory cases, immunosuppressants, including cyclosporine, methotrexate, or tumor necrosis factor α inhibitors, might be used, though experience with them is limited.^{3,4} Maintaining antiretroviral therapy and prophylaxis against opportunist disease is important in patients who receive such immunosuppressants, as is close monitoring of the viral load.

Ustekinumab is an IL-12/IL-23 monoclonal antibody indicated for the treatment of moderate to severe plaque psoriasis, active psoriatic arthritis, and inflammatory bowel disease. It is contraindicated in patients with clinically important active infections, such as HBV and hepatitis C virus infections.⁵ However, it was shown to be safe in a group of 18 patients with HBV who had received antiviral prophylaxis⁶; a degree of reactivation was observed in similar patients who received no such prophylaxis and in others with hepatitis C virus infection.⁷ The simultaneous use of methotrexate with ustekinumab in the treatment of psoriatic arthritis does not appear to affect the safety of the latter drug.⁸ Papparizos et al⁹ described a patient with HIV controlled with antiretroviral drugs who was treated with ustekinumab for psoriasis; no adverse effects were observed.

We report the case of a patient with HBV and psoriasis who was treated with ustekinumab and later became infected with HIV. His ustekinumab treatment

was maintained without subsequent cutaneous or systemic complications.

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