Photosensitive Drug Eruption Induced by Efavirenz in a Patient with HIV Infection

Key words: photosensitive drug eruption, efavirenz, HIV infection

HIV infection causes various acute and chronic cutaneous disorders such as rash, seborrheic dermatitis-like eruption, alopecia, herpes simplex and Kaposi's sarcoma, some of which are associated with immunosuppression. HIV infection down-regulates various types of functional properties of CD4+ helper and regulatory T cells, leading to the devastating immunosuppression in the majority of infected hosts. But HIV infection sometimes induces immunoenhancing features during its clinical course, probably because of the deterioration of the regulatory T cell function. Individuals with AIDS/HIV infection are indeed at higher risk of developing adverse drug reactions (1). Multiple drugs are usually prescribed to the patients with AIDS/HIV infection for preventing the replication of HIV and for the treatment of the associated infectious diseases. In patients with AIDS/HIV infection, the adverse drug reaction often becomes very severe, developing life-threatening toxic epidermal necrolysis and Stevens-Johnson's syndrome (2). It is now known that high CD8+ cell count and age less than 36 years indicate a risk of drug eruption [respective odds ratios: 3.5 (95% CI 1.6–7.8), $p=0.002$, and 2.1 (95% CI 1–4.6), $p=0.06$] (3).

In this issue, Yoshimoto et al reported the first Japanese patient with HIV infection who developed a photosensitive drug eruption induced by efavirenz, a non-nucleotide reverse transcriptase inhibitor (4).

See also p 630.

The patient presented a pruritic edematous erythema on sun-exposed areas such as face, neck and bilateral forearms after playing golf. The photo patch test revealed a positive reaction to efavirenz under exposure to ultraviolet A light. Lopinavir/ritonavir was substituted for efavirenz, and the patient never experienced photosensitivity after the discontinuation of efavirenz. The photosensitivity very much decreases the quality of life. Physicians should be aware of the possibility of photosensitive drug eruption during antiviral treatment for AIDS/HIV infection.

Masutaka FURUE, MD

Department of Dermatology, Graduate School of Medical Sciences,
Kyushu University, 812-8582

References

- 1) Tonnerre P, Delmotte H. Undesirable effects of AIDS treatments. *Rev Infirm* **94**: 12–15, 2003.
- 2) Tan A, Tan HH, Lee CC, Ng SK. Treatment of toxic epidermal necrolysis in AIDS with intravenous immunoglobulins. *Clin Exp Dermatol* **28**: 269–271, 2003.
- 3) Eliasiewicz M, Flahault A, Roujeau JC, et al. Epitox Study Group. Prospective evaluation of risk factors of cutaneous drug reactions to sulfonamides in patients with AIDS. *J Am Acad Dermatol* **47**: 40–46, 2002.
- 4) Yoshimoto E, Konishi M, Takahashi K, et al. The first case of efavirenz-induced photosensitivity in a Japanese patient with HIV infection. *Intern Med* **43**: 630–631, 2004.