Herpes zoster ophthalmicus

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We reviewed patients with herpes zoster ophthalmicus (HZO) seen at the Irrua Specialist Teaching Hospital and the Central Hospital in Benin City, Edo State, Nigeria, for a period of 10 years from July 1993. Of the 44 HZO patients, 28 (64%) were HIV-positive, 7 (16%) were HIV-negative and in 9 (20%) the status was unknown. Most patients (89%) who were HIV-positive were below the age of 50 years, while those who were HIV-negative (71%) were generally above the age of 50 years. This is a clear deviation from the past when HZO was seen mostly in the elderly.

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Herpes zoster results from recrudescence of latent varicella zoster virus from the dorsal root of cranial nerve ganglia present since primary infection with varicella (chickenpox). The commonest causes of varicella recrudescence are decline in cell-mediated immunity related to age,[1] reduced immunity associated with some malignancies such as lymphoma, treatment of malignancies with chemotherapy or radiotherapy, HIV infection, and use of immunosuppressant drugs (such as steroids) after organ transplant surgery or for disease management. HZO occurs when the recrudescence is in the ophthalmic branch of the trigeminal nerve. It presents as vesiculo bullous dermatitis on one side of the face, usually involving the scalp. The infection is distributed along the ophthalmic division of the trigeminal nerve and does not cross the midline. Involvement of the tip of the nose is significant because it implies involvement of the nasociliary nerve and such cases usually involve the cornea on the same side (Fig. 1).

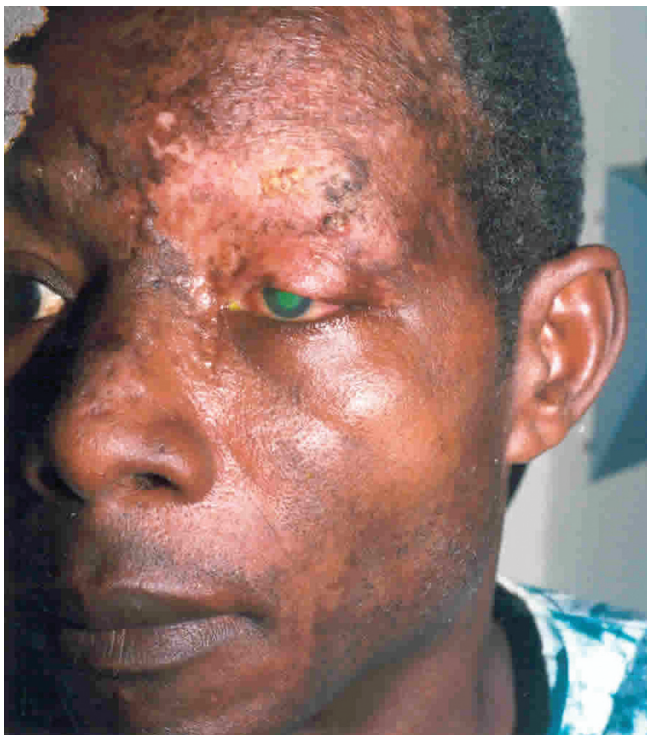

Fig. 1. HZO with ocular involvement (central corneal ulceration staining with fluorescein that resolved with a central leucoma).

The occurrence of varicella zoster virus dermatitis in a person below the age of 50 years should suggest the possibility of an immunosuppressive condition.[2]

Since the initial description of eye abnormalities in HIV-positive patients in 1982,[3] numerous reports have described the spectrum and natural history of HIV-associated eye disorders, which affect 70 - 80% of all patients at some point during their illness.[4]

The majority of patients were managed as outpatients using topical acyclovir for the rashes and acyclovir or idoxuridine (Herpidu) for those with corneal involvement. This was because of the non-availability of highly active antiretroviral therapy and high cost of systemic antiretroviral agents in both centres (as in most hospitals across the country). Supportive treatment for pain relief and anti-inflammatory agents were given when indicated.

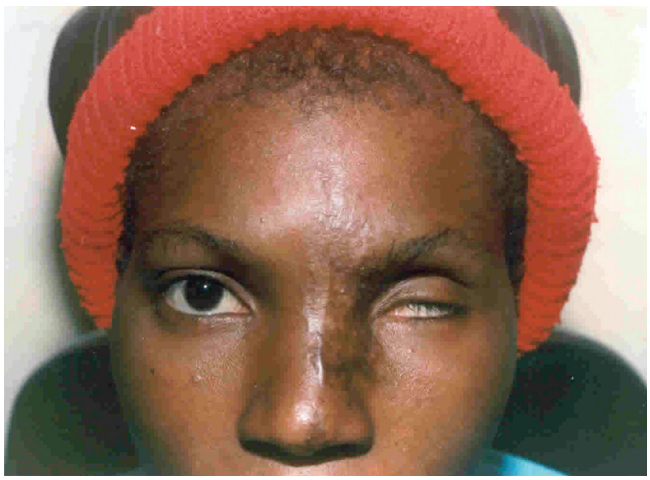

Fig. 2. A 22-year-old woman with severe scarring of the left face from HZO, and an atrophied eye, a complication following a perforated corneal ulceration.

HZO is a known marker of HIV/AIDS in Africa.[5-7] Its ocular effects may be extremely severe (Fig. 2). Patients with ophthalmic herpes zoster who are HIV-negative tend to have less severe infection[8] and also recover faster than those who are HIV-positive.[9]

All adults presenting with HZO should be screened for HIV infection, especially patients below the age of 50 years and if there are no obvious predisposing factors that would explain a reduction in immunity.

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