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LETTER TO THE EDITOR

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Relapsing and disseminated VZV infection associated with post-zoster neuralgia in an HIV-infected patient

Sir: We describe a new case of post-zoster neuralgia in a patient infected with human immunodeficiency virus (HIV) and with relapsing disseminated varicella-zoster virus (VZV) disease.

The clinical presentation and course of post-zoster neuralgia vary greatly among patients [1]. Classically, burning pain sensation on the dermatome related to the previously infected nerve root(s) is the main clinical hallmark of the disease. However, the extent and severity of peripheral nerve involvement may determine the eventual prognosis of the disease [2, 3]. Among the less common clinical manifestations of post-zoster neuralgia is the relapse of painful clinical events. This can represent a troublesome disturbance, compromising the quality of life of these patients. In a number of previous reports, relapse of VZV disease and the related post-zoster neuralgia have never been described [1–4].

A 34-year-old HIV-seropositive, female drug user developed cutaneous herpes zoster on left side of the thorax and on the face associated with Ramsey-Hunt syndrome. The lesions were also present on both legs. Her $CD4^+$ count was 21 cells/μl. Despite administration of acyclovir (4000 mg/daily), the patient developed neuralgia that was treated with carbamazepine. Because of the appearance of disseminated skin rash, the treatment was stopped and substituted with paracetamol-codeine with moderate improvement.

After 6 months, the patient was hospitalized for a new episode of herpes zoster associated with fever and severe pain. The patient was given acyclovir (10 mg/kg day intravenously) in combination with specific anti-VZV human immunoglobulin, as recommended for specific secondary prophylaxis [5]. At the same time ketoprofen and paracetamol-codeine were administered. After discharge, the clinical condition of patient was stable until a persistent headache localized in the frontal region and associated with vomiting and rigor nucalis developed. For this reason the patient was again hospitalized. Simultaneously, vescicular lesions appeared on the face and on both legs. Computed tomography (CT) and magnetic resonance imaging (MRI) (Figs. 1, 2) of the brain gave negative results. Cytological analysis of the vescicular fluid revealed findings typical of herpes infection. The following therapy consisted of ketoprofen, paracetamol codeine and tramadol. Despite treatment, the clinical condition worsened and the patient died after a few weeks.

To our knowledge, this is the first case showing the co-existence of relapsing and disseminated VZV infection in a patient with HIV disease and severe immunodeficiency that has been associated with a marked and intense pain resistant to any analgesic [6]. Interestingly, the occurrence of a severely painful syndrome, such as post-zoster neuralgia, may be putatively correlated to an compromised immune response in an HIV-infected patient. As previously hypothesized in another severe pain syndrome, the cluster headache associated with HIV or VZV infection [7, 8], the host immune deficiency may facilitate the onset and reappearance of post-zoster neuralgia or cluster headache [9]. In this clinical case

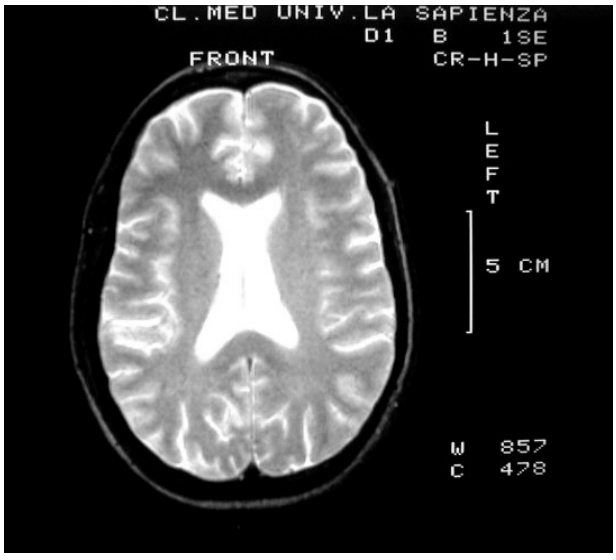

Fig. 1 Normal signal intensity of cerebral MRI sequence in HIV patient with varicella zoster virus (VZV) infection

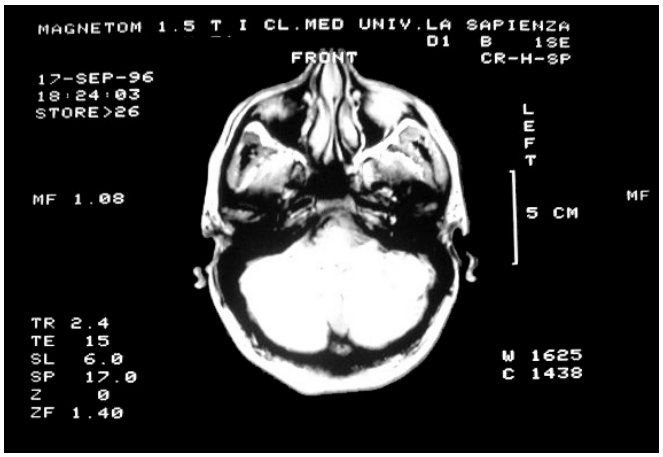

Fig. 2 Normal cerebral CT scan in HIV patient with post-VZV-infection neuralgia

report, we stress that the close dependence between host immunodeficiency and VZV pain-syndrome relapses is not a simple case occurrence but a facilitating terrain for the onset of painful symptoms. To shed further light on the possible mechanisms of this condition, we are continuing a close follow-up of pain syndromes derived from infectious diseases in our HIV patients.

References

1. Breton G, Bricaire F, Caunes E (1998) Treatment of herpes zoster infections in patients infected with HIV. Presse Med 28:1518
2. Harrison RA, Soong S, Weiss HL, Gnann JW Jr, Whitley RY (1999) A mixed model for factors predictive of pain in AIDS patients with herpes zoster. J Pain Sympt Manage 17:410–417
3. Aldeen T, Hay P, Davidson F, Lau R (1998) Herpes zoster infection in HIV-seropositive patients associated with highly active antiretroviral therapy. AIDS 10:1719–1720
4. Alliegro MB, Dorucci M, Pezzotti P, Rezza G, Sinicco A, Barbanera M, Castelli F, Tarantini G, Petrucci A (1996) Herpes zoster and progression to AIDS in a cohort of individuals who seroconverted to human immunodeficiency virus. Italian HIV Seroconversion Study. Clin Infect Dis 23:990–995
5. Leautez S, Bani-Sadr F, Billaud E, Raffi F (1999) Secondary prophylaxis for herpes zoster with oral acyclovir in HIV patients. Pathol Biol 47:570–572
6. Morens DM, Agarwal AK, Sarkar S, Panda S, Detels R (1996) Epidemic zoster and AIDS. Emerg Infect Dis 2:361–362
7. Martelletti P, Di Sabato F, Mezzaroma I, Aiuti F, Giacovazzo M (1993) Cluster headache in an HIV infected individual: a case report. Immunol Clin 12:205–208
8. Giacovazzo M, Martelletti P (1987) Cluster headache following Ramsey-Hunt syndrome and HLA antigen: a case report. Min Med 78:1029–1030
9. Martelletti P, Giacovazzo M (1996) Putative neuroimmunological mechanisms in cluster headache. An integrated hypothesis. Headache 36:312–315

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