HIV-1 and HIV-2 in Spain

Although HIV-1 (human immunodeficiency virus type 1) is prevalent in Central Africa,¹ and in the USA and Western Europe, very few cases of HIV-1 infection have been reported in West Africa, excepting the Ivory Coast.²⁻⁴ In contrast HIV-2 is common in West Africa, where the virus was isolated for the first time, but only sporadic cases of HIV-2 infection have been described in Western Europe⁵ and the USA.⁶ In Spain, HIV-1 infection rates are high among subjects from classical high risk groups (haemophiliacs, drug abusers and male homosexuals),⁷ and some drug abusers have combined HIV-1 and HIV-2 infections.⁸ However, recent sero-epidemiological studies carried out in Spain have shown that HIV-2 infection is restricted to immigrants from West Africa living in Barcelona.⁸

From 1984 to July 1991, 604 African and North African immigrants living in Barcelona were treated for various reasons in the Dermatologic and Internal Medicine Services of a general hospital. All of these patients were also studied to learn the incidence of HIV-1 and HIV-2 infection. Serum samples were screened by ELISA (Organon, Pasteur), Western-Blood 1-2 (Pasteur) and Pepti-Lav (Pasteur).

Except for 45 Moroccan patients, all were blacks from West Africa (80%, Gambia; 12%, Senegal; 3%, Mali; 2%, Guinea-Konakry; and 3%, other neighbouring countries). All but 25 were men. The age of the patients ranged from 16 to 42 years. The average time in Spain was 4 years. The only risk factor for HIV-1 infection was heterosexual intercourse with low socio-economic status prostitutes, among whom HIV-1 infection is common.⁹ Forty-three patients (of the total) were seropositive to HIV-1 (7%). Ten of 462 patients were seropositive to HIV-2 (2.1%). One patient had concomitant HIV-1 and HIV-2 infection. No patient from Morocco was seropositive for either HIV-1 or HIV-2.

The prevalence of HIV-2 infection in our series throughout this period was constant, and is similar to that of healthy control people in West Africa.^{2,3} However, we have observed a dramatic increase in the number of HIV-1 infected cases from 1988 onwards (0% in the first four years, 10% in the last three years) during the same period.

It could be that HIV-1 seropositive patients were infected in Africa, and that the increased incidence in the last years could be coincidental with a similar increase in the incidence of HIV-1 infection in their home countries. However, recent data show that the incidence of HIV-1 is still low among the control population in most countries of West Africa.³ Furthermore, we observed a seroconversion in two patients of our series. Taken together, these features strongly suggest that HIV-1 was not imported, but acquired in Spain, probably through sexual intercourse with prostitutes. Five patients with HIV-1 infection had AIDS, and three of them have already died. Another seven had opportunistic infections and/or ARC. None of the patients with HIV-2 infection had AIDS, but some suffered from minor immunologic abnormalities. African immigrants should be considered as a high risk population for HIV infection because they come from a region in which HIV-2 is endemic and due to their use of unregulated prostitutes frequently infected by HIV-1.

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