Human Immunodeficiency Virus Infection and the Kidney

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Dear Sir,

Kidney disease associated with human immunodeficiency virus infection (HIV) is varied [1-3]. HIV-associated nephropathy (HIVN), the most specific nephropathy, is clinically characterized by severe proteinuria and rapid progression to renal insufficiency and histologically by a pattern of focal segmental glomerulosclerosis (FSGS) [2, 3]. The reported prevalence of HIVN ranges from 1 to 23% [4]. The explanation for this discrepancy of prevalence is unknown, but it has been suggested that it may be due to racial or epidemiological factors [5]. Mazbar et al. [1] referred a low prevalence of kidney disease in HIV-infected patients of the San Francisco area, mostly composed by White and homosexual patients; whereas in the Miami and New York areas [6, 7], HIVN is more prevalent predominantly in Blacks and intravenous drug abusers.

To determine the characteristics of HIVN in our environment, as well as the existence of other kidney complications in HIV-infected patients, two groups of subjects were studied. The first group comprised 300 HIV-infected patients, 64% with AIDS and 36% with AIDS-related complex, treated at the Infectious Diseases Unit of the Hospital Clínic i Provincial of Barcelona for a period of 19 ± 11 months. Ninety-nine percent were White and 66% were intravenous drug abusers. The second group consisted of 7 HIV-infected patients primarily admitted at the Nephrology Unit of the same Hospital, between 1986 and 1991, in order to evaluate kidney diseases.

Among the 300 patients from the first group, none displayed clinical findings of HIVN. Twenty-six patients (8.6%) displayed acute renal failure (10 of prerenal causes, 9 by nephrotoxics and 7 of a mixed origin), all of whom suffered from AIDS. In all cases, renal failure was reversible. Of the 7 patients in the second group, only 1 fulfilled the clinical and histological criteria of HIVN, this patient was the only Black in our population and was a non-intravenous drug abuser. The other 6 patients showed diverse kidney alterations not related to HIVN: membranous glomerulonephritis, diabetic nephropathy, global glomerulosclerosis, minimal change disease, IgA glomerulopathy, hemolytic-uremic syndrome.

The low incidence of HIVN is remarkable in our environment where the HIV-infected population is mostly White and composed of intravenous drug abusers, suggesting that Blacks run a greater risk to develop HIVN.

References

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