Dear Sir,

Acquired immunodeficiency syndrome (AIDS) is currently an important problem for medical practitioners. Although a lot has been written about the prophylaxis of AIDS transmission among homosexuals, hemophiliacs, and health workers who care for these patients, little has been written about the need for dialysis in cases of renal failure.

The etiologic agent of this illness is a retrovirus from the family of human T cell leukemia viruses, called HTLV-III or lymphadenopathy-associated virus (LAV). The disease is mainly transmitted by blood and semen, though there are other ways of transmission very similar to those of hepatitis B [1]. Besides AIDS, other clinical syndromes that are related to the HTLV-III infection have been reported, e.g., transitory inapparent infection, prolonged lymphadenopathy syndrome, AIDS-related complex, and, with particular epidemiological importance, asymptomatic HTLV-III infection [2].

AIDS mainly attacks four risk groups: homosexual men, heroin addicts, hemophiliacs and Haitians [1]. Renal diseases in AIDS patients have been reported [3, 4], and simultaneously the incidence of renal illness is enhanced among heroin addicts by several causes [5]. The possibility that a patient with AIDS or, more probably, a HTLV-III carrier needs dialysis treatment must be kept in mind for the future. In the same way, it is possible that patients undergoing hemodialysis treatment who need multiple transfusions for anemia or preparation for renal transplantation acquire the infection, although the administered blood has been previously tested for anti HTLV-III antibodies. The risk of infection among the other patients on hemodialysis is high, especially if we consider the altered immune system of uremic patients [6].

In our experience, we have treated a 23-year-old male alcoholic and intermittent heroin abuser with a history of polyuria greater than 4 liters per day throughout his life who reached the end-stage renal disease following chronic interstitial nephropathy, probably nephronophthisis. An arteriovenous fistule was made, and he was included in a hemodialysis program. After four sessions, Elisa test for anti HTLV-III antibodies proved positive, and the patient was removed from hemodialysis. A Tenckhoff catheter was inserted and the patient trained for continuous ambulatory peritoneal dialysis treatment.

The WHO has advised the use of the same measures as employed in the prevention of hepatitis B for the prophylaxis of AIDS [7]. In hemodialysis units, these measures include periodic testing for hepatitis B infection of patients and staff, removing HBs antigen positive patients, assigning
staff members with anti-HBs antibodies to care these patients, special measures to prevent the contamination of the patients’ blood and biological fluids, adequate disinfection of the material used, and the vaccination of patients and staff if necessary [8].

Currently, there is no routine method to detect HTLV-III [9]. We can only use the test for anti-HTLV-III antibodies by Elisa [10], but this method does not show in any particular time that the patients are virus carriers, but only suggests that they have had contact with the virus. Furthermore, seronegative carriers [11] and false-positive and false-negative cases [12] pose another problem. However, while there is no method to detect HTLV-III, it is imperative to test for HTLV-III antibodies in every potential high-risk patient on hemodialysis. If the forecasts made about the future extent of AIDS are correct [1], this test must be included in every hemodialysis candidate as a part of the preliminary examination.

The patients with positive HBs antigen are dialyzed in separate units. The isolation of patients with anti-HTLV-III antibodies seems to be essential. However, at least in the present situation, the low number of these patients does not permit the creation of separate units, and, therefore, an alternative treatment may be continuous ambulatory peritoneal dialysis. Nevertheless, the future creation of special units for these patients is a frightening possibility to bear in mind. Another risk to consider is the contamination from health workers, and although at the present time it does not appear necessary to screen the staff members, this possibility must be considered for the future. At present, there is no vaccine available against AIDS [8], but the appearance of such a vaccine would be welcomed, particularly if we consider the concern that the care of these patients produces among nursing and auxiliary workers.

Finally, we must point out that all special measures to prevent the contamination with AIDS patients’ blood or body fluids and to disinfect the used materials are particularly emphasized. In summary, until we have no sensitive and specific methods to diagnose AIDS, as well as the chance to vaccinate hemodialysis patients and staff members, these isolated hemodialysis units for AIDS patients and HTLV-III carriers will not be realized, and, therefore, continuous ambulatory peritoneal dialysis may be an alternative treatment, taking the necessary measures to advise the nurse responsible for training about the subsequent risks.

References


