Letters to the Editor

Received: August 9, 1988

Accepted: August 10, 1988

Am J Nephrol 1988;8:512

AIDS and Dialysis

G.M.	Geoffrey M.	Berlyne
------	-------------	---------

Division of Nephrology, Veterans Administration Hospital, Brooklyn, N.Y., USA

G.M. Berlyne, MD, Division of Nephrology, Veterans Administration Hospital, 800 Poly Place, Brooklyn, NY 11209 (USA)

The article by Perez et al. [Am. J. Nephrol. 8: 123–126, 1988] is important and timely; however, their conclusion that current CDC precautions are sufficient to prevent HIV transmission in the dialysis unit is not warranted from the data. They did not follow the guidelines of the CDC [1, 2] in that they wisely isolated their patients from all non-HIV patients in one unit, and dialysed them only with hepatitis-B-antigen-positive patients in their second unit. We recommended [3] the same precautions in 1986 as the CDC published in 1987, namely gloves, gowns, eyecovers, and face masks to prevent mucosal or skin contamination with infected blood. Because of the occasional occurrence of blood spill from a dislodged needle we advised a transparent plastic bag over the arm to prevent blood spray into the air of the room. Like Dr. Perez and his co-workers, we believe that it is wiser to dialyse these patients separately to insure that no HIV-negative patients are endangered by potential droplet infection from the rare blood spray. The CDC's advice on this matter leaves much to be desired.

With regard to Dr. Perez's data purporting to show lack of transmission to HIV-negative patients this would be quite unremarkable given the fact that the patients in one unit were isolated from HIV-negative patients; and, in addition, the high dropout rate in the study due to death makes it impossible to determine the transmission rate precisely. It would have been more meaningful to study the nurses who had been exposed to these patients. In any case, there is a considerable inherent error in using HIV antibodies to detect infection, as it may take 6 months to convert from negative to positive, and reversion to negative may subsequently occur. HIV virus studies are difficult and may be negative in the presence of HIV infection.

It is clear that we may be overcautious but that may be a desirable fault in our present state of ignorance.

One last point – if a dialysis machine with recirculating volumetric ultrafiltration, e.g. the Hospal (Monitral) machine is used, it should be sterilized after every use and not as the CDC recommends. Apparently, the CDC advisors on dialysis machines are not sufficiently familiar with the structure of commonly used equipment. Recirculating dialysis machines are potentially virus-contaminated internally after each patient use.

One can conclude that the CDC proposals are correct insofar as they go, but that dialyzing HIV-positive patients in the same room as those who are HIV-negative is not advisable and that some machines must be sterilized between patients. We recommend that the CDC guidelines should be amended accordingly.

References

Recommendations for Providing Dialysis Treatment to Patients Infected with Human T-Lymphotropic Virus Type III/Lymph-Adenopathy-Associated Virus. Morbid Mortal Wkly Rep 1986; 35:376–378.

Recommendations for Prevention of HIV Transmission in Health-Care Settings. Morbid Mortal Wkly Rep 1987;36:8S.

Berlyne GM, Rubin J, Adler AJ: Dialysis in AIDS patients. Nephron 1986;44:265–266.