AIDS-Related Complex by Continuous Ambulatory Peritoneal Dialysis

C.J.	Charles J.	Diskin
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Opelika Nephrology Referral Center, Opelika, Ala., USA

Charles J. Diskin, MD, FACP, Opelika Nephrology Referral Center, 122 North 20th Street, Opelika, AL 36802 (USA)

Dear Sir,

Dr. Rao et al. [1] recently proffered insight into the unrewarding task of treating AIDS patients in end-stage renal failure. We report a rewarding case of treating AIDS-related complex by continuous ambulatory peritoneal dialysis (CAPD).

A 19-year-old homosexual man (returned to Alabama in August 1984 from New York City) experienced nausea, anorexia and ankle swelling, with 4+ pretibial edema and 4+ proteinuria. Urinalysis revealed multiple granular casts with no cellular elements. Serum complement levels were depressed at: C3 73 mg/dl, C4 11 mg/dl, and CH50 40 units/ml. Hepatitis B surface antigen and antibodies were negative but core antibodies were positive. A percutaneous kidney biopsy revealed mild interstitial reaction with mesangial expansion within glomeruli.

Immunofluorescent staining showed deposition of IgM, C1, and C3 within the mesangium.

Electron microscopy revealed dense deposits in mesangial matrix with widespread foot process fusion.

A trial of prednisone 1 mg/kg was begun, but the patient was lost to follow-up until November 1985 when he presented with nausea, vomiting, and generalized lymphadenopathy. His serum creatinine was 14 mg/dl. The creatinine clearance was 5 cmVmin. He was started on maintenance hemodialysis and tested for antibodies to HTLV-III. Both the ELISA assay and the Western blot test were markedly positive. The T4/T₈ cell ratio showed marked proliferation of suppressor cells and decreased helper cells. The patient was switched to CAPD where he developed unexplained cachexia. The patient was started on 75 mg of indomethacin three times a day [2]. Approximately 1 year after initiation of CAPD, he developed fever, diffuse lymphadenopathy with hepatosplenomegaly and positive serology for cytomegalovirus infection. Shortly thereafter he developed esophageal candidiasis. Both infections responded favorably to appropriate treatment. The patient contemplates vocational rehabilitation. He continues to have a positive Western blot test, as

well as a marked suppression of his T4/T8 ratio, and pronounced leukopenia. Seventeen months after initiation of CAPD, he has gained 12 lb and has normal visceral and somatic protein.

This case complements the excellent work of Rao et al. [1] in several ways. Firstly, the prognosis of uremic patients with AIDS-related complex may not be as dismal as that of AIDS patients even should they develop opportunistic infections after starting chronic dialysis. Secondly, CAPD with the obligatory calories of dialysate may prevent the inanition seen with hemodialysis. The addition of indomethacin may be helpful in reversing unexplained cachexia in patients with HTLV-III infections on chronic dialysis. And lastly, frequent infections and an altered immune status may not be a necessary prerequisite for the development of renal

involvement from HTLV-III infection. We infer that AIDS nephropathy may develop in patients with AIDS-related complex.

References

Rao, T.K.S.; Friedman, E.A.; Nicastrì, A.D.: The types of renal disease in acquired immunodeficiency syndrome. *N. Engl. J. Med.* 5/6.1062–1068 (1987).