HIV Infection and Renal Transplantation

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Dear Sir,

Transmission of HIV infection by a renal allograft [1–4] and renal transplantation in asymptomatic carriers of the HIV [5] have been reported. Although the number of individuals studied is quite small, the initial impression is that these patients have a high incidence of opportunistic infections and Kaposi's sarcoma [1, 3, 5, 6].

We report our experience in 2 patients, who probably were asymptomatic carriers at the moment of renal transplantation

Patient A

A 29-year-old woman received a cadaver renal transplant in April 1985; she had been on hemodialysis for 33 months and had received a total of 33 blood units before transplantation and 3 during surgery. Posttransplantation immunosuppression consisted of prednisone (0.5 mg/kg/day) and azathioprine (2.5 mg/kg/day). On day 4 an episode of acute rejection was treated with 3 bolus of 250 mg of methyl prednisolone; on day 9 she presented urinary infection (*E. coli*) and on day 23 an abdominal mass was observed; this mass was a perirenal hematoma which was evacuated without complications. On day 30 she was discharged with a serum creatinine of 60 $\mu\text{mol/l}$.

Ever since she has been free of special medical problems except two episodes of urinary infection (*E. coli*). Three years later, she is maintained on 7.5 mg/day of prednisone and 25 mg/day of azathioprine; her serum creatinine is 72 $\mu\text{mol/l}$ and the lymphocyte count 1,150/ μl (T4/T8 ratio 0.7).

Patient B

A 48-year-old woman received a cadaver renal transplant in May 1986; she had been on hemodialysis for 48 months and had received 8 blood units before transplantation and 2 during surgery. Posttransplantation immunosuppression was achieved with prednisone (0.5 mg/kg/day) and azathioprine (2.5 mg/kg/day). She developed oliguria after transplantation. On day 5 she had a fever without evidence of infection; treatment with 3 bolus of 500 mg of methyl prednisolone was started; because of the persistence of the fever, administration of ATG (1 g/day) for 14 days was initiated on day 10; as the fever reappeared on day 19, methyl prednisolone (3 bolus of 500 mg) had to be reestablished; on day 25, triple therapy with ciclosporin, azathioprine and prednisone was started. Renal function improved

progressively and she was discharged on day 45 with a serum creatinine of 135 $\mu\text{mol/l}$. Six months later she was readmitted because of monodermatome herpes zoster. She has not presented any special problems since except three episodes of urinary infection (*E. coli*), the later in February 1987. At the present (2 years later) she is in good health, maintained on ciclosporin (300 mg/day) and prednisone (10 mg/day); her serum creatinine is 162 $\mu\text{mol/l}$ and lymphocyte count 1,710/ μl (T4/T8 ratio 0.96).

In November 1987 we performed an investigation of HIV infection (ELISA) in our renal transplant population (52 patients). In both patients the result was positive and confirmed by IFI and Western blot analysis. Risk factors for HIV infection were not known to exist.

No pretransplantation blood samples from these patients are available nor are blood samples from the renal donors, but the investigations (ELISA) of the recipients of the other kidneys, of their husbands and perioperative blood donors were negative. We can assume that these patients were asymptomatic HIV carriers at the moment of renal transplantation, who probably were infected by blood transfusions during hemodialysis.

In summary, we report two patients, probably HIV asymptomatic carriers at the moment of renal transplantation, on good health 2 and 3 years later.

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References

Prompt CA, Reiss MM, Grillo FM, et al: Transmission of AIDS virus at renal transplantation.

Lancet 1985 ;ii: 672. L'Age-Stehr J, Schwarz A, Offermann G, et al: HTLV-III infection in kidney transplant recipients. Lancet 1985 ;ii: 1361–1362.

Kumar P, Pearson JE, Martin DH, et al: Transmission of human immunodeficiency virus by transplantation of a renal allograft with development of the acquired immunodeficiency syndrome. Ann Intern Med 1987;106:244–245.

Bowen, PA, Lobel SA, Caruana RJ, et al: Transmission of human immunodeficiency virus (HIV) by transplantation: clinical aspects and time course analysis of viral antigenemia and antibody production. Ann Intern Med 1988;108:46–48.

Oliveira DBG, Winearls CG, Cohen J, et al: Severe immunosuppression in a renal transplant recipient with HTLV-III antibodies. Transplantation 1986;41:260–262.

Rubin RH, Jenkins RL, Shaw BW, et al: The acquired immunodeficiency syndrome and transplantation. Transplantation 1987;44:1–4.