HIV Infection after Kidney Transplantation

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Dear Sir,

Since many uremic patients cannot be transplanted in Italy because of the shortage of organ donors, some of them go to countries where it is easier to be transplanted. Some of these countries belong to geographical areas where the AIDS epidemic is in its early ascending phase and HIV infection is spreading rapidly, mostly in urban areas [1-3]. This situation could account for a high risk of HIV infection by blood and organ graft when the donor tests are negative for antibody ('window period') at the time of donation [4]. A retrospective study revealed that 4 Omani patients who visited the Bombay kidney bazaar became HIV positive after transplantation [5].

We report on a dialysis patient who acquired HIV infection after a stay in an Indian hospital for a kidney transplantation. The 57-year-old Italian female sustained a kidney transplantation at Bombay, India in October 1992 from a living paid donor. She has been on chronic hemodialysis since 1988 in an Italian unit because of polycystic renal disease. On September 25, 1992, she was HBsAg negative, anti-HCV positive and anti-HIV-1-2 negative by EIA assay. Two weeks after the intervention the patient, on immunosuppressive treatment, had fever, anemia and renal failure, and underwent hemodialysis at Bombay hospital where, a few days later, she underwent another surgical intervention with removal of her own polycystic kidney which had become infected. There, the patient received a blood transfusion of 7 units between October 7 and 20. Soon thereafter, she returned to Italy and underwent dialysis again in the previous center, where she received 2 blood units on October 31 and 2 plasma units on December 9.

On September 24, 1993, 1 year after the failed transplantation, in the course of a routine HIV screening of all the patients in the unit, she was found anti-HIV positive (EIA and Western blot); HIV-Ag was negative, and CD4 count was 543/mm³. At a careful epidemiological evaluation, no personal risk factors were attributable to the patient: she was married, heterosexual, monogamous, and had never used illicit drugs. Her husband is still HIV-Ab negative by EIA assay 12 months after she was found to be HIV infected.

The kidney donor was an Indian male, whose anti-HIV-1-2 test (EIA) was negative at the time of transplantation; the Indian transfused blood units were certified as HIV-Ab (EIA) negative. No further data on the HIV serostatus of the Indian donors are available. Italian blood and plasma

HIV-Ab-negative donors were traced and retested for HIV and they were found to be HIV-Ab negative up to 1 year after the donation. In the Italian unit there were 2 HIV-positive patients on separate dialysis machines, and dialysis filters were never reused.

Although HIV nosocomial transmission during dialysis cannot be ruled out, our data suggest that the patient could have acquired HIV infection through transfusions or kidney transplantation from a donor in the 'window period' of the infection. Besides the unethical thriving trade in human organs, that has recently become illegal in India thanks to a landmark bill [6], there is a risk of HIV infection receiving blood or organs from donors in countries where there is a steady increase in the HIV seropositivity, and where AIDS control programmes are unsatisfactory [7]. We believe that patients, who plan to be transplanted abroad should be properly informed about this risk. Finally, this case emphasizes the need for testing the patients at least 6 months after transplantation.

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