Outcome in emotionally related living kidney donor transplantation

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BACKGROUND: The growing shortage of cadaver kidneys, the limited possibilities to expand the living related donor pool and the good results obtained in our centre with poorly matched cadaver kidneys, led us in 1991 to begin accepting highly motivated, unrelated, living kidney donors who had a strong emotional bond with the recipients. METHODS: Between 1 January 1991 and 1 January 1996, 46 potential living kidney donors and their emotionally related recipients were evaluated. Twenty-three cases were accepted for renal transplantation after thorough somatic and psychological evaluation. The mean post-transplant follow-up until 1 April 1996 was of 28 +/- 3 months. Compatible blood groups and a negative cross-match were mandatory, but no minimal HLA matching was required. RESULTS: There was a 50% drop-out rate following the initial screening. The main reasons for not performing transplantation were immunological contraindications in 39% of the cases, somatic in 30.5%, psychological in 26% and socioeconomic in 4.5%. In the accepted group of recipients, 48% (11/23) received transplants without chronic dialysis. Donor survival was 91%; two deaths unrelated to nephrectomy occurred 1 year after donation. The 2-year actuarial recipient and graft survivals were 100% and 91% respectively, compared to 99% (recipients) and 93% (grafts) in the non-HLA-identical living related kidney transplant group, and to 93% (recipients) and 83% (grafts) in the cadaver kidney transplant group. Recipient rehabilitation was completed after 4 +/- 1 months. Emotionally related donors returned to work 5 +/- 2 weeks after nephrectomy, and no donor regretted his decision, even in the case of failure. CONCLUSIONS: Kidney transplantation from emotionally related living donors represents a valuable option, allowing more patients with end-stage renal disease to avoid chronic dialysis. Recipient and graft outcomes were superior to cadaver kidney transplantation. Motivated and emotionally related donors should be allowed to donate one of their kidneys provided that they are carefully selected and thoroughly informed.