

LETTER TO THE EDITORS

Very long-term survivors of kidney transplantation

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Dear Sirs,

We read with interest the experience of Bererhi *et al.* with very long-term survivors of kidney transplantation [1]. Patients with kidney failure frequently present at a young age therefore long-term transplant outcomes are an important clinical endpoint to be studied. However, whilst there is robust 1.5 and 10-year survival data, there are less data on ultra long-term transplant survival because of the lengthy follow-up necessary.

We have previously described patients with 20-year transplant survival [2]. We now describe our experience of patients with a kidney transplant functioning for in excess of 30 years in a large, national, transplant database. In Ireland, all patients are transplanted at a single centre. Standard immunosuppression in this period was azathioprine (2 mg/kg) and prednisolone. Patients transplanted between January 1970 and November 1981 were included. This left 349 transplants in 324 patients. Of these, 44 patients (12.6%) had a renal transplant functioning for in excess of 30 years. Table 1 compares the characteristics between those who had a functioning kidney transplant for in excess of 30 years to those whose transplant functioned for less than 30 years. Those with a transplant functioning for in excess of 30 years were more likely to be younger, have fewer human leukocyte antigen (HLA) mismatches and have a living-related donor. Gender was not a factor in long-term graft survival. Donor age was not significant perhaps reflecting the overall low mean donor age in the study period. Acute rejection (occurring within the first 3 months of transplantation) occurred in 60.6% of nonsurvivors and 48.7% of survivors ($P = 0.157$). Median creatinine was 102 $\mu\text{mol/l}$ (range 66–386 $\mu\text{mol/l}$). The prevalence of ischemic heart disease, skin malignancy and other malignancy was 13.6%, 45.4% and 18%, respectively. The lower than expected prevalence of ischaemic heart disease may be because of patients with ischaemic heart disease being more likely to die before reaching 30 years post-transplant. Of the 44 patients who had graft function at 30 years, three were subsequently lost; two to death with a functioning graft at 31 and 34 years post-transplant (both because of malignancy), and one where the cause was unknown, at 30 years post-transplant.

Table 1. Characteristics of kidney transplant recipients.

Variable	Nonsurvivors ($n = 305$)	Survivors ($n = 44$)	<i>P</i> -value
Recipient age (mean \pm SD)	35.0 \pm 11.6	28.4 \pm 10.1	<0.001
Donor age (mean \pm SD)	27.8 \pm 15.3	25.7 \pm 10.1	0.940
Recipient sex (male)	67.2%	63.6%	0.638
Donor sex (male)	62.9%	51.3%	0.164
Cold ischaemia time (mean \pm SD)	11.1 \pm -5.0	11.1 \pm -6.1	0.794
Number of HLA mismatches (mean \pm SD)	1.36 \pm -1.2	0.26 \pm -0.75	<0.001
Living-related donor	12.5%	52.3%	<0.001

Survivors = transplant function for >30 years.

The superior long-term results with living-related kidney transplantation highlight the importance of expanding living-related kidney transplant programmes. The very high prevalence of cancer emphasizes the need for continued close surveillance of these patients following their prolonged exposure to immunosuppression.

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Conflict of interest

None.

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References

1. Bererhi L, Pallett N, Zuber J, *et al.* Clinical and immunological features of very long term survivors with a single renal transplant. *Transplant Int* 2012; **25**: 545.
2. Traynor C, Jenkinson A, Williams Y, *et al.* Twenty year survivors of kidney transplantation. *Am J Transplant* 2012; doi: 10.1111/j.1600-6143.2012.04236.x.