

WHY ALL POTENTIAL LIVING DONORS DO NOT ACHIEVE THEIR AIM

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PROBLEM: The number of renal transplants occurring annually continues to rise in the United Kingdom, however this is outstripped by the increasing need for potential donors. Living related donation currently forms a third of all transplants nationally but nonetheless a significant number of potential live donors never reach transplantation for various reasons. Moreover, recent recommendations from the Department of Health suggest that from December 2008, the length of time taken from the start of a live donor's formal work-up until transplantation should take no longer than 18 weeks.

PURPOSE: In our District General Hospital renal unit, our potential live donors are worked-up locally in conjunction with a tertiary transplant centre. This study was designed to identify the time taken for successful transplantation from the first clinic appointment. Furthermore, in those who were unsuccessful, we wished to clarify the reasons why they failed and the time taken to work-up and reach this decision in order to optimise both our care of potential donors and if possible increase donation rates.

DESIGN: A retrospective audit of potential live donors, identified from notes of transplant recipients was carried out for all potential donors seen in our unit from February 2002 until January 2009. Excluded from the study were those donors in whom the recipient ultimately received a simultaneous pancreatic kidney transplant. Endpoints were defined as time from donor's first clinic appointment to either date of successful transplantation, date of cadaveric transplantation or date the individual was informed that they were unsuitable for donation,

FINDINGS: 30 potential donors were identified over this seven year time period, however the notes and associated data was only retrievable for 20 individuals and is outlined in Table 1.

*Table 1-
Summary of
endpoints
and duration
of work-up*

Time from first clinic appointment to:	Number of individuals	Mean time (months)	Range (months)
Successful living related transplantation	7	15.7	9 to 38
Cadaveric transplantation	4	8.8	1 to 18
Deemed unsuitable for transplantation	9	4.9	0 to 9

Of the 9 unsuitable for donation: 3 were precluded due to donor renal disease, 3 due to non-renal disease in the donor and a further 3 due to ABO incompatibility.

CONCLUSION: These results show that on average, donor work-up takes much longer than the 18 week recommendation (only 5 out of 20 individuals), while only a third of those total potential donors who attended clinic resulted in actual donation. Cadaveric transplantation often occurs before the donor is fully worked-up.

RELEVANCE: There is a substantial cost and psychological morbidity associated with preparing potential donors; studies previously have only looked at successful donation, this study however demonstrates that any assessment needs to take into account the significant number of individuals who do not reach the donation stage. Moreover, some individuals are receiving cadaveric transplants while awaiting live-related donation, in the process receiving a less effective graft and denying other potential recipients of cadaveric transplantation.