

Excellent Results of Living Unrelated Renal Transplantation (LURT) - A Single Center Experience in the Balkans

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Introduction

The increased incidence of end stage renal disease in the region, the growing shortage of cadaver kidneys and the lack of any co-operation and organ sharing among the Balkan countries, led us recently to begin accepting highly motivated, unrelated living kidney donors who had a strong emotional bond with the recipients.

Despite the ethical issue of the problem, many transplant centres in the developed world in Europe and USA have accepted the procedures and started performing LURT always bearing in mind the danger of a commercialisation of the transplantation. (1,2,3)

Methods

From 1998 to 2003, 14 LURT were performed in our Center. As suitable donors were accepted: Six spouses (9 wives and 2 husbands), one brother in law, one mother in law and one relative. ABO compatibility and negative cross match were only criteria for the medical acceptance. The mean donor's age in group I (LURT) is 34+5 while in the Group II (LRT) 61.3+7. The immunosuppression included a quadruple sequential protocol with Il-2R antagonists (Daclizumab or Basiliximab) induction, late Ciclosporin A, MMF and Prednizolon as a maintenance therapy. One-year graft survival, rejection episodes, surgical complications, delayed graft function and actual serum creatinin were analysed. The results were compared with 22 living related transplants performed in the same time in our center.

Results

Results are presented on the Table 1:

	LURT	Living related tr.
1-year graft survival	100 %	95 %
DGF	1	6
Rejection episodes	3 (21%)	5 (25%)
Surgical complications:		
- ureteral leakage		
- wound infections	2	2
- lymphocele	2	1
	0	1
Serum creatinin	101+22	142+34

Discussion

The discrepancy between the increased demand and the available organs justifies the use of all possible sources, including living elderly donors, living emotionally but not genetically related donors, as well as marginal donors. (4,5,6). The superiority of the living unrelated donors in our paper is due to the much younger donor's age in comparison with the elderly living related donors, which is accepted practice in our center. On the other side the powerful quadruple sequential immunosuppression significantly decrease incidence of acute rejection episodes which contribute to the very good patients and graft survival. The use of unrelated kidney donors in the country expanded our donor pool for several suitable donors in the year. It is especially important bearing in mind that the routine cadaver transplantation in the country is not fully established. As it is well known the Balkan are is multiethnic, multicultural and multireligious. Organ donation, basically should be a superior donor's will. Therefore, every case must be individually assessed to eliminate any kind of pressure or payment. The current legislation in the country allows us to use of emotionally related donors (predominantly spouses). The decision-making process for the acceptance or not the unrelated donors include social worker and psychiatrist, legislation and the ethical committees of the Doctor's Chamber and Ministry of Health. The steps of the decision-making process are presented on the Table 2.

Table 2: The steps of the final acceptance of LURT

First consultation

Social worker activity

Psychiatric consultation

Formal consent in front of judge

Doctor's Chamber Ethical Committee

Ministry of Health – Ethical Committee

Conclusion

Data presented in the study fully justify the use of living emotionally related kidney donors. Spousal and nonspousal LURT should actively encourage helping alleviate the current donor kidney shortage in the Balkans.

LURT may be a valid alternative for cadaver organ shortage bearing in mind always the danger of commercialisation of the procedure.

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