



FIFTEEN YEARS OF LIVING DONOR KIDNEY TRANSPLANTATION PROGRAMME IN ARMENIA

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Background, aims

The number of patients (pts) with end stage renal disease (ESRD) is continuously increasing. In 2002 thanks to the cooperation with European centers (University Hospitals of Antwerp and Zurich) a living-related kidney transplantation (LRKT) programme was established in Armenia. The aim of this study is to evaluate the results of LRKT in Armenia.

Methods

Between 2002 and 2016 overall 129 LRKT were performed. All donors and recipients were ABO-compatible and cross-match negative. HLA mismatches at the A, B and DR loci were taken into consideration. We evaluated the frequency of complications and pts and graft survival by Kaplan-Meier method.

Results

The study includes 129 pts (2 had second transplant). Mean age at the time of LRKT was 35.0 ± 12.9 years (13.0-65.7), males – 69.8%. In 7 pts (5.4%) preemptive KT was performed. Mean age of the donors was 44.9 ± 7.7 years with female predominance (67.4%). Pts received triple immunosuppression, which initially mainly (80; 62.0%) consisted of prednisolone, cyclosporine A (generics, oral solutions) and mycophenolate mofetil. Induction therapy used selectively (29; 22.5%), mainly in highly sensitized pts (ATG in 2 and Basiliximab in 27 pts). The main complication was acute rejection. Pts' non-compliance was the leading reason for the graft loss (Table 1). Overall, 1-, 3-, 5-year graft and pts survival rates were >92%. Ten-years graft and pts' survival rates were 88.5% and 89.8% -respectively (Fig. 1, a, b).

Conclusions

- KT is the optimal treatment of ESRD in countries with limited resources.
- Pts' non-compliance was ruled out by use of convenient forms of medications.
- LRKT program alone is far from covering all the demand for KT and must be complemented by deceased donor transplantation.

Table 1. Clinical outcomes after renal transplantation, n=129

Complications	n	%
Acute rejection	58	45.0
CMV disease	22	17.1
Acute tubulonecrosis	12	9.3
Herpes zoster	9	7.0
Oncological complications	9	7.0

Graft loss	n=16
Non-compliance	7
Chronic transplant nephropathy	3
Surgical complications	3
Reduction of immunosuppression due to complications	2
Hyperhomocysteinemia	1

Death with functioning grafts	n=9
Cardio-vascular complications	3
Oncological complications	2
GI bleeding	2
Systemic amyloidosis in pts with FMF	2

Fig. 1. Graft and pts' survival

