Living donor kidney transplantation in the hemodialysis-naive and the hemodialysis-exposed: A short term prospective comparative study


Abstract:

Introduction: Preemptive (P) living donor kidney transplantation (LDKT) provides better survival rates, quality of life and economic saving. However, the extent of these advantages over those with a short period of pre-LDKT dialysis is not known. Objectives: Evaluation of the patients' characteristics and short-term outcomes of PLDKT and LDKT after a pre-transplant period of hemodialysis (HD) not >6 months. Patient and methods: This study was conducted between June 2010 and June 2012 and included two groups. Group-I included recipients without HD before operation. Group-II included those who had a period of HD ≤6 months. Recipients and donors were evaluated according to the classic work up. Follow-up for 12 months was scheduled. Results: Group-I included 30 recipients and group-II included 15 recipients. Demographic and clinical characteristics were similar except for mean recipient age (44 versus 34.3 years; \( p = 0.024 \)), recipient donor age difference (\( p = 0.03 \)), job categories (\( p = 0.047 \)) and ABO distribution (\( p = 0.01 \)). Cumulative graft (0.88 versus 0.93) and recipient (0.92 versus 0.100) survival rates were non-significantly different. Graft function and mean serum creatinine level were within normal up to 12 months. Acute graft rejection (AGR) was significantly higher in group-II (16.7% versus 46.7%; \( p = 0.03 \)). However, lymphoceles were significantly more common in group-I (40% versus 6.7%; \( p = 0.02 \)). There was no delayed graft function (DGF), major urinary or vascular complications. Conclusion: PLDKT has a lower rate of AGR. Despite it has a higher rate of lymphoceles, it saves the patient the morbidities of vascular access and inconveniences of HD. Hence, PLDKT is recommended as the first choice for each KT-candidate.

Keywords:

Preemptive; Kidney; Transplantation

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