Laparoscopic kidney retrieval in donor with an extended criterion : Assessing the safety and outcome

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Abstract

The term marginal kidney donor / extended donor criterion is not clearly defined. In this article we assess the safety and outcome of laparoscopic donor nephrectomy (LDN) in donors with an extended criterion. A retrospective analysis of our database was done to assess the outcome of extended donor. Analysis was done between normal donors (group 1) and donors with extended criterion (group 2). The parameters analyzed were pre and post operative serum creatinine in donors and recipients, serum creatinine at day 1, 7, 30 days and 1 year in recipients, operative time, warm ischemia time, analgesia requirement in donors and impact of extended criteria on recipient outcome. Group I and group II had comparable nadir creatinine at 1 year in recipients. Donors with BMI more than 30 kg/m2 required more number of ports and hospital stay. Recipients' nadir creatinine with single vs. multiple vessel donors was comparable at 1 year. Donors with urolithiasis had good recipient outcome. The donor creatinine was comparable in extended and non extended indication donors. In our study, LDN was found to be safe, feasible and efficacious in donors with extended indications such as old age, BMI more than 30, multiple vessels and anatomical anomalies. Recipient outcome for donors with normal vs. extended criterion was comparable at one year follow up. All donors with extended criterion had normal post operative creatinine levels with maintained nadir stable creatinine at two year follow up. Long term follow up would be of interest.

Key words: Laproscopic donor nephrectomy, extended indications