

Ureteral Complications of Renal Transplantation

Introduction and Objectives: Ureteral complications occur in 3-14% of renal transplantations. Our objective was to review the ureteral complications of our living related renal transplantation cases and to relate that to open and laparoscopic donor nephrectomy.

Materials and Method: We reviewed our cases of renal transplantation which were done between September 2008 and December 2011, retrospectively, who had a living donor nephrectomy, whether open or laparoscopic. All ureters were implanted using the extra vesical lich-gregoir technique and a double-J stent was inserted for 2-3 weeks.

Results: There were 242 renal transplantations performed in our center. Of the living related transplants 143 (126 adult and 17 pediatric recipients), 111 (77.6%) were done laparoscopically while the rest 32 (22.4%) were done by open surgery (because we didn't start laparoscopy at the beginning of our transplant program). Four (2.8%) of the living related recipients had ureteral complications. Three of them have received kidneys retrieved by open nephrectomy and one of them was in the laparoscopy group. Two of the open group patients had stenotic distal ureters which were managed successfully endourologically and the third case (0.7%) had severe distal ureteric stenosis and it was managed by open uretero-cystostomy. While the case who received kidney donated laparoscopically had a stenotic distal ureters which were managed successfully endourologically.

Conclusion: the incidence of ureteral complications in our series is within the reported international rate. Laparoscopic donor nephrectomy in our hands has fewer ureteric complications (probably due to extra care during ureteric dissection) than open donor nephrectomy.