

EARLY OUTCOMES OF LESS NEPHRECTOMY EXPERIENCE

R.E. Sanchez-Salas¹, V. Flamand¹, J. Chan¹, M. Galiano¹,
F. Rozet¹, E. Barret¹, X. Cathelineau¹

¹Institut Montsouris, Paris, France

OBJECTIVE: To present experience with LESS partial nephrectomy (PN) and LESS radical nephrectom (RN) in comparison to the corresponding conventional laparoscopic (CL) approach.

PATIENTS AND METHODS: A head-to-head comparison of 22 LESS nephrectomies (15 RN/7PN) with a control group of 22CL nephrectomies (15RN/7 PN) performed between January2009 to October2010. Classic laparoscopy and LESS: transperitoneal transumbilical approach with keyhole trocar placement and Gelpoint (Applied Medical) for access. A 5mm 30°-endoscope, CL instruments and SonoSurg ultrasonic scissors (Olympus*) were utilized; comparisons regarding preoperative, peri-operative and immediate postoperative parameters.

RESULTS: With the RN analyses, LESS and CL cohorts were similar in age (71vs.68y, p=0.53) and tumor size (56vs.65.3mm, p=0.30). Intraoperative blood loss (133cc-LESSvs.72cc CL, p=0.58) and ORtime (LESS: 120.5minvs; CL: 120min, p=0.19) were comparable. Morphine use (LESS: 29 mgvs; CL: 32mg, p=0.85) and length of hospital stay (LESS: 5.2dvs; CL: 6.2d, p=0.37) were similar. In the PN subgroup, no difference was noted in age (59.3y LESS vs.58.6y CL, p=0.93) and tumor size (28mmLESSvs.32.3mm CL, p=0.56). In 2/7 LESS-PN, a vascular clamping mean time of 32.5min was recorded compared with 23.8min for 6/7 CL-PN(p=0.35). Blood loss was similar (185.7ccLESSvs. 172.9ccCL,p=0.91). There was no difference when comparing operative time (109.3minLESSvs.140minCL, p=0.08). Morphine requirement (LESS 32.8mgvs; CL58.9mg, p=0.29) and length of hospital stay (LESS 4.7dvs. 5.7d, p=0.16) were comparable. We verified 2 post-operative complications in LESS arm. One conversion to open surgery in the LESS arm was performed in one patient due to vascular stapling malfunctioning. No tumor recurrence has occurred in any of the patients in both arms.

CONCLUSION: LESS approach is feasible for RN and in highly selected patients for PN.