



3-D LAPAROSCOPIC PARTIAL NEPHRECTOMY- SINGLE CENTRE EXPERIENCE IN THE SARS-COV-2 ERA

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INTRODUCTION: Three-Dimensional (3-D) Laparoscopic Partial Nephrectomy shows favorable surgical results compared to open nephro-conservative surgeries without lagging behind in oncological results, blood loss, reduced postoperative pain, shorter recovery, late renal function and cosmetic result. We report our experience with laparoscopic partial nephrectomy.

METHODS AND MATERIALS : We reviewed our retrospective database of 3-D laparoscopic partial nephrectomy. Data collected and analysed included preoperative patient demographics, presenting features, tumor characteristics, operation time, blood loss ,postoperative hospital stay, complications and cancer recurrence.

RESULTS: We identified 37 patients who underwent 3-D laparoscopic partial nephrectomy between 2019 and 2021. The median age was 62.8 years and the median BMI was 27.2. Median operative time was 162 min and the median warm ischemic time was 17 min . Median length of postoperative hospital stay was 4,2 days. The median blood loss (Hgb decrease) was 1,2 g/dl. The median size of the kidney tumor was 3,4cm. The surgical margins in all patients were negative without perinephric fat invasion. The percent of the patients with clear cell renal cell carcinoma was 65% (24 patients), 11%(4 patients) with chromophobe renal cell carcinoma , 11%(4 patients) with papillary renal cell carcinoma and 13%(5 patients) with benign renal neoplasms . Only one patient had cancer recurrence and the median follow-up of the patients was 18 months (6-30 months).

Table 1. Patients' general demographic, pre- and peri- operative data

Male	22 (59,45%)
Female	15 (40,55%)
Median age (range) year	62.8 years (28–83)
Median BMI in kg/m ² (range)	27.2 (18.7–44.3)
Median operative time	162 min(61-263 min)
Median warm ischemic time	17 min(0-22 min)
Median blood loss(Hgb decrease)	1.2 g/dl (0,5-3,2)
Median length of postoperative hospital stay	4,2 days(2-9)
Median size of the kidney tumor	3,4 cm(2,8-7,8cm)
Median RENAL score	8 (4-10)

CONCLUSION: The experience of our clinic in the treatment of kidney tumors with 3D laparoscopic partial nephrectomy suggested favorable results for our patients in the SARS –COV-2 era. The delay in treatment , which was inevitable due to the special circumstances had no or little impact on the short term oncologic outcomes, according to our results .

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