

OPEN VERSUS LAPAROSCOPIC PARTIAL NEPHRECTOMY FOR CLINICAL T1a RENAL TUMORS: SURGICAL, FUNCTIONAL AND TRIFECTA OUTCOMES BASED ON A MATCHED-PAIR COMPARISON OF 280 PATIENTS (RECORD PROJECT)

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Scopo del lavoro

To report a match-pair comparative analysis between open (OPN) and laparoscopic partial nephrectomy (LPN) for clinical (c) T1a renal masses from a large prospective multicenter dataset.

Materiali e metodi

The RECORD Project is a 4-year prospective observational multicenter study promoted by the Italian Society of Urology. The study includes all patients who underwent OPN and LPN for kidney cancer between January 2009 and January 2011 at 19 Italian centers. Open and Laparoscopic groups were compared regarding clinical, surgical, pathologic, functional results and TRIFECTA outcome (WIT 25 minutes, Surgical Complications (SC) and the achievement of the TRIFECTA outcome.

Risultati

Overall, 301 patients had OPN and 149 LPN. Groups were matched 1:1 (140 matched pairs) for Clinical Diameter, Tumor Side and Type of Indication. The achievement of the TRIFECTA outcome was comparable between the OPN vs LPN group (78.6% vs 74.3%, p. ns). Overall, 46 Total Complications after OPN vs LPN (17.9% vs 15%, p ns) occurred. At multivariate analysis the surgical approach (Laparoscopic vs Open) was not a predictor of a negative TRIFECTA and SC. Whereas, the Laparoscopic approach was associated with a significantly mean longer WIT (19.9 vs 15.1 min; p25 minutes (RR: 6.29, 95%CI: 2.47-16.07), p

Discussione

Trifecta should be a routine goal during partial nephrectomy.

Conclusioni

No significant difference in achieving the TRIFECTA outcome (WIT

Table: Univariate and Multivariate analysis for Trifecta outcome.

	Univariate analysis for TRIFECTA			Multivariate analysis for TRIFECTA not reached		
	Reached	Not Reached	p	RR	95% CI	p
Age, mean (SD)	62.1 (11.7)	64.1 (11.3)	0.24	1.01	0.98-1.04	0.46
Tumor size, mean (SD)	2.8 (0.8)	2.4 (0.77)	<0.0001	2.15	1.49-3.11	<0.0001
Surgical approach, n (%):						
VI.P	104 (74.3%)	36 (25.7%)	0.40			
Open	110 (78.6%)	30 (21.4%)				
Tumor growth pattern, n (%):						
> 50% exophytic	171 (78.4%)	47 (21.6%)	0.14			
≤50% endophytic	43 (69.4%)	19 (30.6%)				
Tumor location, n (%):						
polar	128 (78.5%)	35 (21.5%)	0.33			
mesorenal	86 (73.5%)	31 (26.5%)				
Symptoms at diagnosis:						
asymptomatic	178 (77.4%)	52 (22.6%)	0.41			
symptomatic	36 (72%)	14 (28%)				
Indication						
elective	184 (78.6%)	50 (21.4%)	0.04	2.14	1.03-4.45	0.04
relative/absolute	30 (65.2%)	16 (34.8%)				

LAPAROSCOPIC SINGLE-SITE VERSUS CONVENTIONAL LAPAROSCOPIC RADICAL NEPHRECTOMY FOR RENAL CELL CANCER IN PATIENTS WITH INCREASED COMORBIDITIES AND PREVIOUS ABDOMINAL SURGERY: PRELIMINARY RESULTS OF A SINGLE-CENTRE RETROSPECTIVE STUDY.

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Aim of the study

Laparoscopic single-site surgery (LESS) represents an evolution of laparoscopy for the treatment for urologic diseases. The aim of this study is to investigate the feasibility of LESS in patients with increased comorbidities and previous abdominal surgery undergoing radical nephrectomy (LESS-RN) for renal cell carcinoma.

Materials and methods

A total of 25 patients with increased comorbidities and previous abdominal surgery who underwent LESS-RN were compared to 31 patients with the same characteristics after conventional laparoscopic radical nephrectomy (LRN). LRN was performed between January 2009 and May 2010, and LESS-RNs were performed between June 2010 and November 2011. Demographic data and perioperative and postoperative variables were recorded and analysed.

Results

The mean ASA score in the LESS-RN and LRN groups was 3.2 ± 0.4 , and the mean BMI was 32.7 ± 2.1 and 34.2 ± 0.8 kg/m², respectively. The mean operative time in the LESS-RN and LRN groups was 143.7 ± 24.3 and 130.6 ± 26.5 min, ($p = 0.11$), and the mean hospital stay was 3.8 ± 0.8 versus 4.2 ± 1.4 days in the two groups ($p = 0.06$), respectively. Three and four complications were recorded in the LESS-RN and in the LRN groups, for a mean complication rate of 12 and 12.9% ($p = 0.12$), respectively. All tumours were organ-confined with negative surgical margins, and the mean R.E.N.A.L. nephrometry score for LESS-RN and LRN was 9.78 ± 1.7 and 9.82 ± 1.3 ($p = 0.14$), respectively.

Discussion

In our experience, there was no problem to perform LESS in obese patients too. Generally, muscle relaxation is essential in these patients, and this requires a continuous collaboration between surgical and anaesthesiologic team. At 14-month follow-up, no tumour recurrences nor progressions nor port-site metastasis was recorded.

Conclusions

LESS-RN in patients with increased comorbidities and previous abdominal surgery is equally effective as LRN without compromising on surgical, oncologic short-term and postoperative outcomes.