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**Introduction & Objectives:** Renal cell carcinoma (RCC) has historically been managed by radical nephrectomy (RN). Nowadays most lesions are diagnosed as incidental small renal masses (SRM) due to use of imaging. Currently partial nephrectomy (PN) is the gold standard for the treatment of T1a(<4cm) renal tumors. In carefully selected patients and in specialised centers where surgical expertise is available the indications for PN have expanded to include T1b tumors (4-7cm). The widespread use of robotic technology is pushing the boundaries of PN even further. In expert hands, RAPNs (robotic assisted partial nephrectomies) are performed routinely and safely for T2a (7-10 cm) and T2b (>10 cm) tumors, with good oncological and functional outcomes. Our objectives are to present our experience of T2 partial nephrectomies for renal tumors, analyse the oncological and functional outcomes, and assess the feasibility of the procedure for larger tumors in experienced hands.

#### Materials & Methods:

Cases of T2 RAPNs were selected from a prospectively collected database of the OLV Hospital, Belgium between 2006 and 2018. Results were analysed and summarised retrospectively.

#### Results: Study Period 2006-2018

Total number of T2 RAPN cases N=28

The first T2 RAPN was performed in 2010, reflecting the learning curve

Age Distribution–Median 65 years(Range 25-84 years)

Gender Distribution M:F=23:5

BMI 27.5(Range 20-36)SD+/-4.62

Comorbidities; Previous abdominal surgery–6pts; HTN–5pts; DM–2pts

2/28 patients had a single kidney

Side of surgery LEFT:RIGHT=14:14 (50%:50%)

6/28 patients(21%) had pain or haematuria

Preoperative Median Tumour size 8cm, (7-13cm)

Median RENAL Score 9

In 4/28 cases no ischaemia was used; 24/28(86%) had warm ischaemia type approach.

Median WIT was 15 minutes(10-32min);

EBL Median 250ml; Mean 533ml;(50–3500ml)SD+/-873ml

Median Procedure Duration was 150min(90–356min)

4/28 Tumours were benign (3 Oncocytomas, 1 AML);24/28 tumours were malignant–3 papillary RCC, chromophobe-1; clear cell RCC-20

Pathological Staging–pT2a–15 cases; pT2b–7 cases; pT3a–6 cases

One case had a positive surgical margin

Median Length of Hospital Stay(LOS) was 5 Days(3-11 Days)

Complications–Ileus 1Pt;ChylousLeak–1Pt;Pneumonia–1Pt;Fever–1Pt; Hb drop–1Pt; Total 5/28 patients had a complication  
 Oncological Follow up–2/28(7%)Progression of disease;2/28(7%)Deceased;24/28 (86%) Alive

	Preoperative	Day 1	6 months	12 months	24 months	36 months
Median Creatinine mg/dL	1.09 (0.59-1.98)	1.20 (0.59- 2.35)	1.25 (0.62–2.2)	1.18 (0.48–2.19)	1.03 (0.58–2.3)	1.19 (0.59-1.98)
Median eGFR ml/min/1.72m2	66 (33->90)	62.78 (26->90)	56 (28->90)	48 (29-68)	39.5 (27-44)	74 (35-85)

**Conclusions:**

Robotic Assisted Partial Nephrectomy for T2 renal tumors “can be difficult but difficult is also possible” – Prof. Alex Mottrie. Previous experience in robotic surgery and RAPN for T1 tumours is a logical and necessary step prior to attempting surgery on larger and more complex tumors. Oncological and functional outcomes appear favorable in our patient cohort.