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Introduction & Objectives: Nephron sparing surgery is an effective treatment for RCC. Oncological outcome is equivalent to radical nephrectomy, with the added functional advantage. It is underutilized, especially in tumors in anatomically challenging positions like central and hilar positions.

Materials & Methods: Hospital case notes and electronic records of 101 consecutive cases of partial nephrectomies, d conducted at a single center over the last 8 years were analysed. Data was assessed on the tumor number, size, position (upper zone, central/hilar and lower zone), histology, margin status, operative time, ischaemia time, peri-operative complications, length of stay and recurrences so far. This data was analysed according to tumor site (hilar/central vs polar).

Results: 26 cases were in the mid zone, 33 were lower and 42 were upper zone. 57 were elective and 2 cases were absolute, 4 were imperative, 1 case was a relative indication for nephron sparing surgery. 8 had bilateral tumors. Cold ischaemia was used in 1 cases of the time (28 mins), warm ischaemia in 20 cases (average 15.3 mins) and no arterial clamping in 87 cases (zero ischaemia). The collecting system was opened in 18 cases. Average operative time was 141 min and average length of stay 10.6 days (range 1-21 days). To date there have been no recurrences or metastatic disease.

Position of tumor	Upper	Mid	Lower
Tumor number	42 1 Imperative 1 Absolute 40 Elective	26 All elective	33 29 elective 1 relative 3 absolute
Size average (range) mm	33.3 (5-80 mm)	30.5 (9-65 mm)	(15-60 mm)
Histology	Clear cell renal ca 26 Chromophobe 2 Oncocytoma 7 Papillary 8 Other cancer 1	Clear cell renal ca 20 Chromophobe 1 Oncocytoma 3 Papillary 1 AML 1	Clear cell renal ca 14 Oncocytoma 13 Chromophobe 2 Papillary 2 AML 1 Other cancer 1
Bilateral tumours	4 cases	2 case	1 case

Margin status	1 margin positive, no recurrence	All negative, 2 with distant spread.	All negative, one recurrence
Operative time	184(120-360) mins	138.8 (120-180) mins	156.6 (120-360)
Cold ischaemic time	0 cases	1 case (28 mins)	0
Warm ischaemic time	8 cases (12.3 mins) Average 10.8 mins Range (4-25 mins)	5 cases Average 14.2 mins Range (5-20 mins)	4 cases Average 18.7 mins Range (12-25 mins)
Zero ischaemic time	34 cases	20 cases	29 cases
LOS average (range)	4.94 (0-8 days)	4.91 (1-21 days)	5.4 (3-13 days)
Collecting system opened	7 cases	6 cases	5 cases
Intraoperative Complications	0	0	None
Post-operative complications	0	2 wound infections 1 chest infection	? 2 cases of bleeding
Conversion to nephrectomy	0	0	0

Conclusions: There was no difference in these results between central/hilar tumors as opposed to upper and lower pole tumors. Nephron sparing surgery for central and hilar tumors is safe and effective. We compare results to other published series.