Kidney Cancer: Localized: Surgical Therapy VI
Moderated Poster 59

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MP59-01
IMPACT OF HOSPITAL VOLUME AND SURGEON VOLUME ON ROBOT-ASSISTED PARTIAL NephRECTOMY OUTCOMES: A MULTICENTER STUDY

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INTRODUCTION AND OBJECTIVES: To assess the impact of hospital volume (HV) and surgeon volume (SV) on perioperative outcomes of robot assisted partial nephrectomy (RAPN).

METHODS: All consecutive patients who underwent a RAPN from 2009 to 2015 at eleven institutions were included in a retrospective study. To evaluate the impact of hospital volume we divided RAPN into four quartiles according to the caseload per year: low HV (<20/year); moderate HV (20-44/year); High HV (45-70/year); very high HV (>70/year). The surgeon volume was also divided into four quartiles: low SV (<7/year); moderate SV (7-14/year); high SV (15-30/year); very high SV (>30/year). The primary endpoint was the Trifecta defined as the following combination: no complications, warm ischemia time <25 minutes and negative surgical margins.

RESULTS: In total, 1222 RAPN were included. The mean caseload per hospital per year was 44.9 (± 26.7) RAPN and the mean caseload per surgeon per year was 19.2 (± 14.9) RAPN. The TRIFECTA achievement rate increased significantly with SV (69.9% vs. 72.8% vs. 73% vs. 86.1%; p<0.0001) and HV (60.3% vs. 72.3% vs. 86.2% vs. 82.4%; p<0.0001). The positive surgical margins rate (p=0.02), length of hospital stay (p<0.0001), warm ischemia time (p<0.0001) and operative time (p<0.0001) decreased all significantly with increasing surgeon volume. The positive surgical margins rate (p=0.02), length of hospital stay (p<0.0001), warm ischemia time (p<0.0001), operative time (p<0.0001) and major complications rate (p=0.01) decreased all significantly with increasing hospital volume. In multivariate analysis adjusting for both HV and SV (model 3), HV remained the main predictive factor of TRIFECTA achievement (OR=3.70 for very high vs. low HV; p<0.0001) whereas SV was not associated with TRIFECTA achievement (OR=1.58 for very high vs. low SV; p=0.34).

CONCLUSIONS: In this multicenter study HV and SV both influenced greatly RAPN perioperative outcomes, but HV appeared to have a greater impact than SV.

MP59-02
CHARACTERISTICS AND PERIOPERATIVE OUTCOMES FOLLOWING SURGICAL TREATMENT FOR RENAL CELL CARCINOMA IN VERY ELDERLY PATIENTS (≥75 YEARS): DATA FROM THE LATIN AMERICAN RENAL CANCER GROUP (LARC)

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INTRODUCTION AND OBJECTIVES: The incidence of renal cell carcinoma (RCC) is increasing globally due to an aging population and widespread use of imaging studies. Surgery is the standard of care for localized RCC, however hesitancy to an aggressive surgical approach may preclude older patients from receiving optimal treatment. The aim of this study was to describe the characteristics and perioperative outcomes in very elderly patients (VEP).

METHODS: This is a retrospective observational study of prospectively collected data of 4101 patients who underwent treatment for RCC from 1990-2015 in 28 centers from 8 Latin American countries. We compared baseline characteristics as well as clinical and perioperative outcomes according to age groups (<75 vs. ≥75 years). Surgical complications were classified with the Clavien-Dindo score. We performed logistic regression analysis to identify factors associated with perioperative outcomes and complications.

RESULTS: Median follow-up was 20 months. There were 518 patients (12.6%) ≥75 years (see Table 1). On bivariate analysis, younger patients had a higher body mass index (27.4 ± 6.1 vs. 26.1 ± 4.6, p<0.01) and were more active smokers (10.7% vs. 7.9%, p<0.00). Older patients had more hypertension (22.8% vs. 13.2%, p<0.01), worse performance status (ECOG >1 in 10.7% vs. 5.7% p<0.01) and higher ASA score (ASA >2 in 34% vs. 15.6%, p<0.01). There were no differences among clinical stage, multifocality, pN or pM stages between study groups. However, stage pt3-T4 was more common in the
VPE (25.4% vs. 20.7%, p<0.04). Laparoscopic approach was more frequent in the VPE (43.2% vs. 37%, p<0.04). Partial nephrectomy and lymphadenectomy were performed less frequently in the older group (p<0.01, and p<0.02, respectively); there were no differences in surgical time, surgical margins, estimated blood loss (EBL), blood transfusions or complication rates. Length of stay was slightly longer in the VEP (4.1-4 vs. 4.1-3 days, p<0.01). On multivariate regression analysis, EBL>500cc (OR 2.06, CI 95% 1.36-3.11, p<0.00) was independently associated with perioperative complications.

CONCLUSIONS: Despite VEP having more comorbidities, worse performance status and more pT3-4 tumors, surgical resection of RCC is a safe and successful intervention in this subgroup. Perioperative outcomes are similar to their younger counterparts. Age alone should not guide decision making in these patients and treatment must be tailored according to performance status and severity of other comorbidities.

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MP59-03
A MULTICENTRE ANALYSIS OF THE ROLE OF THE G8 SCREENING TOOL IN THE ASSESSMENT OF PERI-OPERATIVE AND FUNCTIONAL OUTCOME IN ELDERLY PATIENTS WITH KIDNEY TUMOURS
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INTRODUCTION AND OBJECTIVES: Increasing life expectancy in the general population and the fact that a disproportional burden of cancer occurs in people age ≥ 65 years old have generated great interest in delivering better cancer care for older adults. EORTC and NCCN recommend that all patients with cancer age ≥ 70 years old should undergo some form of geriatric assessment. G8 Screening Tool is a robust geriatric tool to identify a geriatric risk profile and for prediction of functional decline and prognostic information for overall survival. We evaluated the role of G8 Screening Tool in the assessment of outcome of elderly patients (≥ 70 y.o.) underwent surgery for kidney tumours.

METHODS: We prospectively enrolled 162 patients (≥ 70 years old at surgery date) from January 2012 to January 2016 underwent surgery at two urological institution. G8 Screening Tool was applied to each patient before surgery. We divided population into two groups (frail group vs. not-frail group) in relation to the geriatric risk profile based on G8 score (-14 vs. >-14 respectively). The aim was to identify the role of G8 Score in predicting intraoperative, postoperative complications and functional outcomes.

RESULTS: A total of 70 females (34%) and 92 (46%) males were included in the analysis. 69 patients (42.6%) underwent PN, while 93 patients (57.4%) underwent RN. Mean age at surgery was 76.57 (SD ±6.37). Comorbidity factors were included: mean CCI was 3.06 (SD ±1.99) with CCI > 5 points in 18 patients (15.65%), mean BMI was 25.15 (SD ±2.87), 55 patients (34%) with DM, 98 patients (60%) with HTN. CKD stage III was present in 73 patients (45.1%) underwent surgery. Mean ECOG PS was 1.53 (SD ±0.66) with score ≥ 3 in 7 patients (6.1%). Mean ASA Score was 2.84 (SD ±0.73). According to the G8 Score, 91 patients (60%) were included in the frail group and 71 (40%) in the not-frail group. 41 patients of frail group vs. 2 patients of not-frail group developed intraoperative complications (p<0.0001). 51 patients of frail group vs. 4 patients of not-frail group developed postoperative complications (p<0.0001). After a mean follow-up of 40.56 months, mean eGFR was 43.72 ml/min/1.73m2 (SD±21.49) in frail group vs. 47.53 ml/min/1.73m2 (SD±23.96) in not-frail group (p<0.015).

CONCLUSIONS: G8 Screening Tool seems to be an effective and useful instrument to predict the risk of complications and functional outcomes in elderly patients candidate for kidney surgery. However, further investigations should be necessary to confirm the good potential of this tool.

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MP59-04
IS THERE A ROLE FOR NEPHRON SPARING CYTOREDUCTIVE PARTIAL NEPHRECTOMY IN METASTATIC RENAL CELL CARCINOMA? 
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INTRODUCTION AND OBJECTIVES: Cytoreductive nephrectomy prior to targeted adjuvant therapy has been shown to improve survival in select patients with metastatic renal cell carcinoma (mRCC). The usual approach is radical nephrectomy, though some tumors may be amenable to partial nephrectomy. This study evaluates survival outcomes in patients who underwent cytoreductive therapies in the setting of mRCC, and compares them based on treatment modality.

METHODS: The SEER 18 database was queried for patients diagnosed with mRCC from 1933 to 2013. Exclusion criteria included diagnosis at autopsy, multiple primaries, and incomplete pathological or surgical data. Data was collected on demographics, staging, procedure type and survival outcomes. A separate comparative analysis was performed on patients with cT1 tumors when staging information was available.

RESULTS: Of the 18,443 patients identified with mRCC who met inclusion criteria, 83.6% were white and 67.9% were male. Mean age was 62.7 years. Tumor laterality was 8408 right, 8998 left, 197 bilateral and 840 unspecified. Cytoreductive intervention was performed in 7884 of these patients: 7598 radical nephrectomy, 208 partial nephrectomy and 78 ablative. Overall and cancer specific survival for the entire cohort and each treatment group is listed in Table 1. Subgroup analysis of patients with cT1 tumors (n=1590) showed 578 had cytoreductive therapy: 499 radical nephrectomy, 63 partial nephrectomy and 16 ablation. In this group, patients who underwent partial nephrectomy had improved overall and cancer specific survival when compared to patients who underwent ablation or radical nephrectomy (p<0.0001), see Fig 1.

CONCLUSIONS: Patients who undergo cytoreductive partial nephrectomy for mRCC have improved survival when compared to patients who undergo radical nephrectomy or ablation. As such, partial nephrectomy should be considered even in the setting of metastatic disease for select patients. Further studies are required to confirm the findings of this study.