enucleation is employed quite frequently even at institutions that do not support its ubiquitous use. These data lay the groundwork for determining whether RT is a modifiable variable for functional and oncologic outcomes in patients who undergo NSS.

86 ENDOSCOPIC ROBOT-ASSISTED SIMPLE ENUCLEATION (ERASE) VS. OPEN SIMPLE ENUCLEATION (OSE) FOR THE TREATMENT OF CLINICAL T1 RENAL MASSES: ANALYSIS OF PREDICTORS OF TRIFECTA OUTCOME

Matteo Bonifazi, Andrea Mari, Francesco Sessa, Riccardo Campi, Tommasi Chini, Davide Vanacore, Riccardo Tellini, Mauro Gacci, Alberto Lapini, Lorenzo Masieri, Graziano Vignolini, Sergio Semini, Marco Carini and Andrea Minervini

Division of Urology, Department of Urology, Careggi Hospital, University of Florence, Florence (FI), Italy

**Aim:** The aim of this study was to analyse the intra- and post-operative complications, as well as the predictive factors of Trifecta outcome in patients submitted to endoscopic robot-assisted simple enucleation (ERASE) and open simple enucleation (OSE) for clinical T1 renal masses. **Materials and Methods:** Overall, 634 cases treated with OSE (n=290) and ERASE (n=344) were prospectively recorded in our Department between 2006 and 2014. Trifecta was defined as simultaneous ischemia time <25 min, no surgical complication and negative surgical margin. A univariate analysis and multivariate logistic regression were performed for Trifecta. **Results:** The two groups were comparable for body mass index (BMI), comorbidity, tumor side, clinical T score, tumor diameter, surgical indication, pre-operative renal function, pre-operative hemoglobin and hematocrit. A significant difference was found between the OSE and the ERASE groups in operative time (115 (96-130) vs. 150 (120-180) minutes, p<0.0001), pedicle clamping (93.8% vs. 69.2%, p<0.0001), estimated blood loss (EBL) (150 (100-200) vs. 100 (100-143) cc, p<0.0001) and intraoperative complications (3.4% vs. 1.7%, p=0.02). The two groups were comparable for warm ischemia time (WIT) ≥25 min. A significant difference was found between OSE and ERASE in overall (16.6% vs. 5.5%, p<0.0001), Clavien 2 (11.7% vs. 4.4%, p=0.02) and Clavien 3 (3.1% vs. 1.7%, p=0.04) post-operative surgical complications, length of stay (6.0 (5.0-7.0) vs. 5.0 (4.0-6.0) days, p<0.0001), pre-operative 1st day delta creatinine (0.3 (0.2-0.4) vs. 0.15 (0.1-0.2) mg/dl, p<0.0001), positive surgical margins (2.1% vs. 1.5%, p=0.04), and Trifecta achievement (73.8% vs. 85.5%, p=0.0001). At univariate analysis, a higher median clinical diameter, a higher mean age, a higher median Charlson comorbidity index (CCI), endophytic tumor growth pattern, renal sinus and calyceal dislocation of the tumor, a higher median PADUA score and OSE were predictive factors of Trifecta achievement. At multivariate analysis, CCI lost significance (p=0.26), while age (odds ratio (OR)=1.02, 95% confidence interval (95% CI)=1.00-1.04, p=0.001), clinical diameter (OR=1.22, CI=1.05-1.42, p=0.008), PADUA score (OR=1.23, CI=1.07-1.41, p=0.004) and OSE (OR=1.74, CI=1.13-2.68, p=0.01) were confirmed predictive factors for Trifecta failure. **Conclusion:** The ERASE is a feasible and safe technique, which shows a comparable WIT, together with a significantly lower EBL, surgical complications’ rate, length of stay and a significantly higher Trifecta achievement compared to OSE. Age, comorbidity, tumor diameter and PADUA score, in association with surgical approach, represent significant predictive factors of Trifecta failure.

87 PROSPECTIVE ANALYSIS OF COMPLICATIONS AND THEIR PREDICTIVE FACTORS AFTER PARTIAL NEPHRECTOMY IN A MULTICENTER COMPARATIVE ITALIAN STUDY (RECORDI)

Andrea Mari1, Andrea Minervini1, Alessandro Antonelli2, Riccardo Bertolo3, Giampaolo Bianchi4, Marco Borghesi5, Cristian Fiori6, Nicola Longo6, Giuseppe Martorana3, Vincenzo Mirono6, Giuseppe Morgia7, Giacomo Novara8, Francesco Porgpiglia9, Bruno Rovereto10, Riccardo Schiaviina, Sergio Semini1, Francesco Sessa1, Claudio Simeone2, Mario Sodano2, Riccardo Tellini1, Carlo Terrone11 and Marco Carini1

1Division of Urology, Department of Urology, Careggi Hospital, University of Florence, Florence, Italy; 2Department of Urology; Azienda AO Spedali Civili Di Brescia, Italy; 3Department of Urology, University of Turin, Ospedale San Luigi Gonzaga, Orbassano, Italy; 4Policlinico Di Modena, Department of Urology, University of Modena, Italy; 5Department of Urology, University of Bologna, S. Orsola-Malpighi Hospital, Bologna, Italy; 6Urology Department, University Federico II of Naples, Via S.Pansini, Naples, Italy; 7Luna Foundation, Roma, Italy; 8Department of Urology, University of Padua, Padua, Italy; 9Department of Urology, University of Turin, Ospedale San Luigi Gonzaga, Orbassano, Italy; 10I.R.C.C.S. Policlinico San Matteo, Department of Urology, Pavia, Italy; 11Urology, Maggiore Della Carità University Hospital, University of Eastern Piedmont, Novara, Italy