

## P185

### **PREDICTORS OF OVERALL AND NEW-ONSET RENAL FUNCTION IMPAIRMENT AFTER PARTIAL NEPHRECTOMY: RISULTATI FROM TWO-YEARS FOLLOW UP OF A PROSPECTIVE MULTICENTRE STUDY (RECORD 1 PROJECT)**

A. Minervini, A. Mari, R. Campi, A. Antonelli, R. Bertolo, G. Bianchi, A. Cocci, C. Fiori, S. Giancane, N. Longo, V. Mirone, G. Morgia, G. Novara, F. Porpiglia, R. Schiavina, S. Serni, C. Simeone, M. Sodano, B. Rocco, C. Terrone, M. Carini (*Firenze*)

#### **Scopo del lavoro**

The Scopo del lavoro was to analyse renal functional outcomes after partial nephrectomy (PN) and to search for predictive factors of chronic kidney disease (CKD) impairment in a multicenter prospective observational study (RECORD Project).

#### **Materiali e metodi**

Overall, 1055 patients treated with PN for cortical renal tumors were prospectively recorded from 2009 to 2012. A 24-months functional follow-up was recorded in 709 patients. A uni- and multivariable logistic regression analysis for overall and new-onset CKD impairment (stage migration) were performed.

#### **Risultati**

Median eGFR was 84.5 (69.9-99.1) ml/min/1.73m<sup>2</sup>. According to eGFR, CKD was stage 1 in 275 (38.8%), stage 2 was 341 (48.2%), stage ≥3 was in 92 (12.9%) patients. Open, laparoscopic and robot-assisted PN was performed in 335 (47.3%), 259 (36.6%), 114 (16.1%) cases. Pedicle clamping was performed in 62.4% of cases. Median warm ischemia time (WIT) was 17 (IQR: 13-22) minutes. Median delta eGFR at 3rd, 30th POD was 10.2 (0-23.3) and 8.4 (0-21.2) ml/min/1.73m<sup>2</sup>. Overall and new-onset CKD impairment was recorded in 205 (28.9%) and 125 (45.5%) patients. At multivariable analysis, females (OR 2.82, CI 1.66-4.80, p=1 (OR 2.49, CI 1.6-4.0, p=0,004), higher preoperative eGFR (OR 1.02, IC95% 1.01-1.03 p=1 (OR 2.80, CI 1.35-5.80, p=0,006), lower preoperative eGFR (OR 0.98, CI 0.95-1.00, p=0.02), open surgical approach (OR 2.76, CI 1.12-6.77 p=0.03) and WIT (OR 0.96, IC 95% 1.00-1.00 p 0.03) were significant predictors of new-onset CKD impairment.

#### **Discussione**

Open surgical approach, gender and performance status are significant predictive factors of overall and new-onset CKD impairment. Higher preoperative eGFR showed to be a significant predictive factor for stage migration in the entire cohort due to a significant proportion of CKD stage1 patients closed to the CKD stage2 threshold limit value and, indeed, it turned to be protective in the sub group of patients with CKD stage1.

#### **Conclusioni**

Minutes of WIT seem to be significantly associated with CKD impairment just in patients with a preserved renal function. Further analyses will focus on absolute and % eGFR impairment of the entire series.