

difference was noted in the off-clamp group exclusively for blood loss (OR 0.3, 95% CI 0.09–0.52, $p=0.008$). No differences emerged in post-operative complications, Hb drop >2.5 g/dl, need for transfusions, acute kidney injury, positive surgical margins.

Discussion: The present study did not show consistent differences between the on-clamp and off-clamp approaches in terms of complications, occurrence of acute kidney injury and positive surgical margins.

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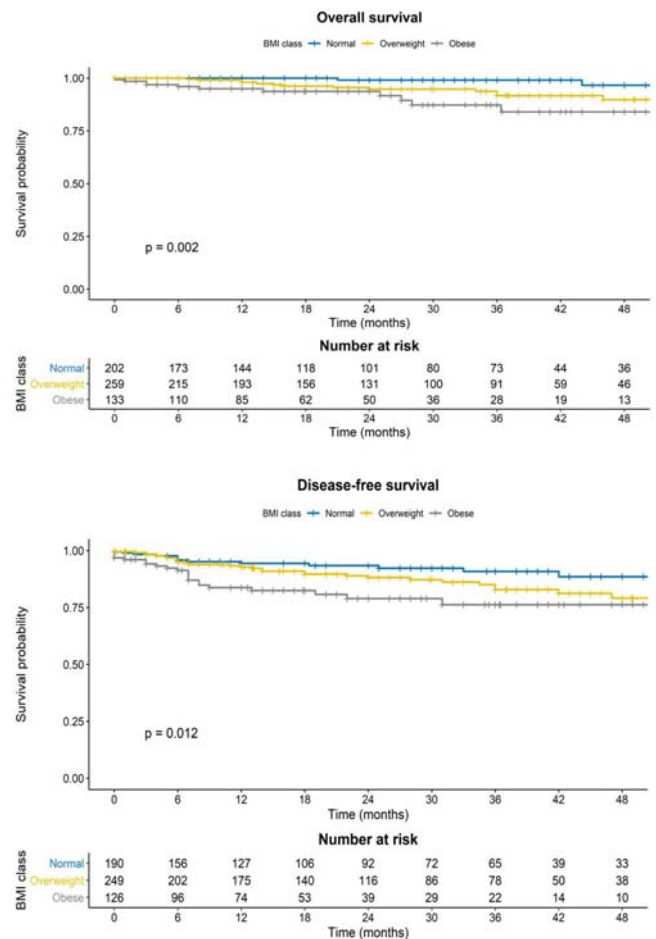
The effect of obesity and overweight status on complications and survival after minimally invasive kidney surgery in patients with clinical T2 renal masses: Evidences from rosula dataset

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Aim of the study: To evaluate the effect of obesity on surgical and survival outcomes in patients with large kidney masses.

Materials and methods: We relied on a multi-institutional (22 centers worldwide) dataset (ROSULA – Robotic Surgery for Large renal masses) to abstract cases of patients diagnosed with $\geq cT2$ renal masses. All patients were treated with laparoscopic radical nephrectomy (LRN) or robotic radical nephrectomy (RRN) or robotic partial nephrectomy (RPN) from the June 2003 and September 2017. Patients were stratified in three strata based on the body mass index (BMI) WHO classification, namely normal-weight (18.5–24.9), overweight (25.0–29.9) and obese (≥ 30.0). Univariable and multivariable logistic regression models tested the effect of BMI on complication rates. Kaplan-Meier curves and Cox regression models tested the effect of BMI on overall mortality (OM) and disease recurrence rates. Covariates were: procedure type, pT stage, pN stage, gender, ASA score, tumor grade and RENAL score. All tests were two-sided and a level of statistical significance was set at $p < 0.05$.

Results: Of 812 patients, the 30.5% were normal-weight, the 42.7% were overweight and 26.8% were obese. LRN, RRN and RPN were performed in 41.5%, 30.0% and 28.5% of cases. Obese patients were younger than normal weight (60.9 vs. 65.0 years, $p=0.015$) and overweight (60.9 vs. 63.0 years, $p=0.041$). Moreover, obese patients were more frequently classified as ASA score 4 (3.2 vs. 1.4 vs. 0.4% respectively obese, overweight and normal patients). Logistic regression models failed to find significant difference in postoperative complication rates ($p > 0.05$). Obese patients required longer operative time compared to normal (184 vs. 130 minutes, $p < 0.001$) and overweight patients (184 vs. 141 minutes, $p < 0.001$). Overall, the 4.1% ($N=33$) and 8.3% ($N=67$) of patients died or experienced local or distant recurrence during the study period. At 5-year overall survival rates were 91.5 (95%CI 81.4–100%), 87.0 (95%CI 79.5–95.3%) and 67.2 (95%CI 42.7–100%) for normal, overweight and obese patients, respectively ($p=0.002$). Similarly at 5-year disease free survival rates were 88.5 (95%CI 82.0–95.6%), 75.2 (95%CI 65.2–86.6%) and 76.2 (95%CI 67.0–86.7%) for normal, overweight and obese patients, respectively ($p=0.012$). Even after multivariable adjustment, obese patients had approximately 9-fold increase of OM risk (HR: 9.00, 95%CI: 1.71–47.37, $p=0.009$) compared to normal weight patients. Similarly, obese patients had more than 2-fold increase of recurrence risk (HR: 2.26, 95%CI: 1.03–4.95, $p=0.042$).



Discussion: Obese patients require longer operation time and more challenging procedure. However, minimally invasive surgery is feasible in these patients with similar results and complication rates across all the three categories. Nonetheless, obese patients have higher mortality and recurrence rates. These differences in mortality rates should be considered to better manage the follow-up of this category of patients

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Which patients with localized renal tumour would achieve the trifecta after partial nephrectomy?

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Aim of the study: To develop a predictive model for the achievement of Trifecta in patients treated with open, laparoscopic and robotic partial nephrectomy (PN) for localized renal masses ($\leq cT2$).

Materials and methods: We retrospectively evaluated 560 consecutive patients who underwent open (OPN: 270), laparoscopic (LPN: 182) and robotic (RAPN: 108) partial nephrectomy (PN) for clinically localized renal cell carcinoma (RCC) at single tertiary center between March 2000 and February 2019. Trifecta was defined as the achievement of warm ischemia time (WIT) ≤ 20 min, absence of positive surgical margins (PSM) and absence of any kind of postoperative complication. First, we compared clinical, pathologic and perioperative outcomes within the three surgical approaches. Second, multivariate logistic regression was performed to identify