28   Outcomes of robotic versus open partial nephrectomy: Results of a single institution series

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Introduction & Objectives: To compare outcomes of robotic (RPN) vs open (OPN) partial nephrectomy using MIC, standard trifecta and novel trifecta.

Materials & Methods: We evaluated data from consecutive 160 RPNs and 227 OPNs performed at our institution between January 2013 and December 2017. Outcomes were assessed using MIC (negative margins, warm ischemia time <20 min and complications <Clavien 3), standard trifecta (negative margins, warm ischemia time <25 min and complications <Clavien 3) and novel trifecta (negative margins, ΔeGFR mL/min/1.73 m [(baseline eGFR - eGFR at discharge)/baseline eGFR] <30% and complications <Clavien 3). CKD-EPI equation was used for eGFR calculation.

Results: Overall, 72% of RPN achieved MIC compared to 79,1% of OPN (p=0.12). Standard trifecta was seen in 80,57% of RPN and 82,52% of OPN (p=0.65). Novel trifecta calculating also eGFR was achieved in 78,2% RPNs and 72,5% OPNs (p=0.25). After multivariable logistic regression analysis, only Charlson comorbidity index (p=0.071) and estimated blood loss (p=0.098) could predict novel trifecta outcome.

Conclusions: RPN and OPN in our series showed similar results in terms of achieving combined outcomes of positive surgical margin rate, warm ischemia time, eGFR and high-grade complication rate.