

PCa. All ePLND included removal of obturator, external iliac, and hypogastric nodes, according to patients selected for the nomogram update. Univariable and multivariable logistic regression models predicting the presence of LNI at ePLND were built-in. Covariates consisted of preoperative PSA, clinical stage, primary and secondary biopsy Gleason grade with or without percentage of positive cores. Patients' data were entered into a logistic model formula derived from the original publication of Briganti. The nomogram was assessed by comparing its predicted probability of LNI with actual presence of LNI. The area under curve (AUC) was used to quantify its predictive accuracy.

Results

Mean preoperative PSA, clinical and pathologic stage, primary and secondary biopsy and pathologic Gleason grade, such as mean number of total cores, positive cores and % of positive cores differed significantly between LNI-positive and LNI-negative patients.

Discussion

We tested the performance characteristics of various Briganti nomogram derived cut-offs (1-14%) for discriminating between patients with and without LNI. In our population, 41.6% of patients were classified.

Conclusions

The updated nomogram predicting lymph node invasion in patients with prostate cancer undergoing extended pelvic lymph node dissection has been externally validated, demonstrating excellent accuracy and calibration characteristics and a general applicability for predicting the presence of LNI.

LUNEDÌ 22 OTTOBRE

SALA VIVALDI

16.00 - 17.05

KIDNEY TUMOR: NEPHRON SPARING SURGERY

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ANALYSIS OF SURGICAL COMPLICATIONS OF RENAL TUMOR ENUCLEATION WITH STANDARDIZED INSTRUMENTS AND EXTERNAL VALIDATION OF PADUA CLASSIFICATION

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Aim of the study

To assess surgical results and morbidity of tumor enucleation (TE), and to evaluate their correlation with PADUA nephrometric score.

Materials and methods

We prospectively gathered data, including accurate analysis of tumor nephrometry, from 244 consecutive patients treated with TE for clinically localized renal cell carcinoma. All surgical results were collected, and perioperative complications were stratified for severity according to Clavien system. Correlation between preoperative variables and surgical results/complications was assessed with uni- and multivariate analysis.

Results

Mean (range) tumor size was 3.6 (0.8-10.0) cm, and mean (range) warm ischemia time was 16.8 (5-35) min. Overall, perioperative complications occurred in 45 patients (18.4%), and of those 8 were medical (3.3%) and 37 were surgical (15.2%; 4 Clavien grade 1, 25 grade 2, and 8 grade 3) complications. Urine leakage rate was 2.0%. No grade 4/5 complications occurred in this series. At univariate analysis PADUA score, endophytic tumor growth, tumor diameter, involvement of UCS and renal sinus resulted associated with warm ischemia time.

Discussion

This study evaluated only patients treated with open surgery, but TE can also be done in laparoscopy and robotics, so the lack of these assessments can be a limitation of this study. Ourselves and others should validate PADUA classification for TE using different approaches. Another potential drawback of this study is the validation

of the PADUA score only, not evaluating other anatomical classifications such as the C-Index [23] or R.E.N.A.L. score [24]. Compared to C Index, we found PADUA score easier to assign, because it does not require a software for the cross-sectional imaging assessment. Furthermore, while considering the R.E.N.A.L. a satisfactory and simple system, we used PADUA score because it includes also the variable "relationship with renal sinus", that we consider potentially related to the degree of complexity of NSS. Indeed, in our analysis the renal sinus involvement was the only anatomical variable who, by itself, resulted independently correlated to Clavien grade 3 surgical complications.

Conclusions

The TE technique was associated with a 15.2% surgical complication rate with a 3.3% reintervention rate (including ureteral stenting and superselective renal artery embolization). Tumor nephrometry and surgical indication resulted independent predictors of Clavien grade 3 complications. The PADUA score is a reliable tool to predict surgical results and morbidity of TE.

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FUNCTIONAL OUTCOME SIX MONTHS AFTER ROBOT-ASSISTED PARTIAL NEPHRECTOMY

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Aim of the study

Renal function preservation is one of the most important goals of nephron-sparing surgery. Currently, only few functional data after robot-assisted partial nephrectomy (RAPN) are available. The aim of this study was to evaluate the renal function impairment after RAPN.

Materials and methods

This is a retrospective study including 196 consecutive patients who underwent RAPN for suspicious renal cell carcinoma (RCC) at two referral centers from September 2008 to September 2010. Serum creatinine and estimating Glomerular Filtration Rate (eGFR) calculated using the Modification of Diet in Renal Disease (MDRD) equation were evaluated in all cases preoperatively and 6 month after surgery. Normal eGFR value was considered higher than 60 ml/min/1.73 m².

Results

143 patients (73%) were male and 53 (27%) female. The mean age was 58.7±12.7. The side was right in 97 patients (49.5%) and left in 98 (50.5%). The mean clinical tumor size was 2.8±1.3 cm. The mean PADUA score was 8.3±1.5. The mean warm ischemia time was 18.3±8.1 minutes. The mean estimated blood loss was 140±135 ml. Intra or postoperative complications were observed in 25 cases (12.8%). 40 (20.4%) tumors were benign and the remaining 156 (79.6%) were malignant. The pathological stage of the primary tumor was pT1a in 134 (85.9%) cases, pT1b in 19 (12.2%), pT2 in 2 (1.3%) and 1 pT3a (0.6%). Mean serum creatinine increased from 0.96±0.30 mg/dl to 1±0.47 mg/dl postoperatively ($p < 60$ ml/min/1.73 m²). Selecting the remaining 168 cases with normal renal function at baseline, the mean eGFR value decreased from 88.6±22.7 to 79.8±24.3 postoperatively.

Conclusions

This study analyzed the renal function in a large series of patients who underwent RAPN. Our data showed a statistically significant impairment of eGFR 6 months after the procedure. These differences seem to be not clinically significant in the majority of evaluated patients. However, 20% of patients with initial normal renal function showed a clinical significant impairment of eGFR values.

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ROLE OF PADUA SCORE TO PREDICT POSITIVE SURGICAL MARGINS AFTER PARTIAL NEPHRECTOMY

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Aim of the study

Positive surgical margins after partial nephrectomy (PN) could be correlated with the size and anatomical characteristics of the treated tumors. The aim of this multicenter study was to evaluate the potential role of PADUA score to predict the risk of positive surgical margins after partial nephrectomy for renal cell carcinoma.

Materials and methods

We evaluated 747 patients who underwent open or robot-assisted partial nephrectomy in 5 European and 2 US Centers. Only patients with renal cell carcinoma were included in this study. Therefore,