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Introdução e Objetivo

Patients with renal tumors at the pT3aN0M0 stage are grouped into a single prognostic category. However, clinical practice reveals that there may still be an understaging within this heterogeneous group of patients due to different oncological evolutions (NOCERA *et al.*, 2022). This study aimed to analyze prognostic factors and overall survival (OS) in patients with T3aN0M0 renal cell carcinoma who underwent radical nephrectomy and establish a prognostic nomogram.

Método

We reviewed the clinical data of adult patients who underwent radical nephrectomy for renal cell carcinoma between December 2007 and January 2022 in a single tertiary oncological institution. Clinical characteristics, clinical-pathological staging, and histopathological characteristics were analyzed. Survival analyses were determined using the Kaplan-Meier curve. A nomogram was established using Cox proportional hazard regression to identify the prognostic factors affecting the overall survival.

Figuras

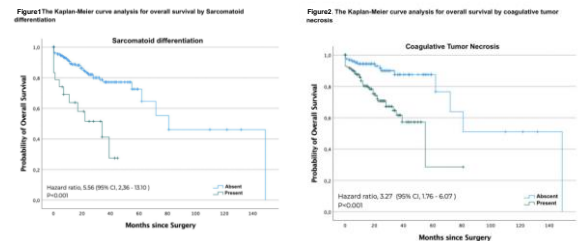


Figure3. The receiver operating characteristic curve and area under the curve value (A) and calibration plot (B) of the nomogram for predicting 5-year overall survival (OS) in the training cohort.

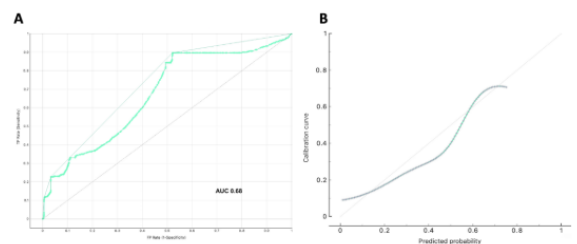
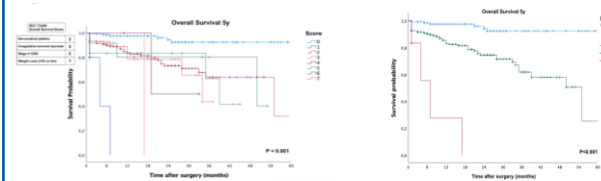


Figure4. Score to predict overall survival in 5 years for patients with renal cell carcinoma (RCC) T3aN0 and Kaplan-Meier curve analysis with log-rank test (A). Stratified score into three categories with log-rank test (B).



Resultados

We analyzed 362 patients classified as pT3aN0M0 stage with a median follow-up of 40 months. According to Cox univariate and multivariate analyses, weight loss greater than 5 % in 6 months before surgery, stage V chronic kidney disease after radical nephrectomy, sarcomatoid pattern, and coagulative tumor necrosis were identified as predictors of overall survival. We developed a score and performed internal and external validation. The time-dependent receiver operating characteristic curve and area under the curve value, calibration curve analysis showed good prediction ability of the score. The nomogram can effectively predict and stratify overall survival after radical nephrectomy in patients with pT3aN0M0 renal cell carcinoma.

Conclusão

Patients with pT3aN0M0 renal cell carcinoma exhibited different characteristics, and those with unfavorable characteristics deserve greater attention during follow-up. This nomogram provides an accurate prediction of overall survival after radical nephrectomy.

Referências

Nocera L, Collà Ruvolo C, Stolzenbach LF, et al. Tumor Stage and Substage Predict Cancer-specific Mortality After Nephrectomy for Nonmetastatic Renal Cancer: Histological Subtype-specific Validation. *Eur Urol Focus*. 2022;8(1):182-190. doi:10.1016/j.euf.2021.02.009