

Singh U.P., Kakoti S., Misra A., Srivastava A.

Sanjay Gandhi Post Graduate Institute of Medical Sciences, Dept. of Urology and Renal Transplantation, Lucknow, India

Introduction & Objectives: Penile cancer is a rare malignancy of the genitourinary tract. We compared T2 and T3 staging according to AJCC 8th edition with Li and Sali staging systems in predicting survival outcomes.

Materials & Methods: A retrospective study of patients suffering from penile cancer from June 2015 to March 2020 was done. The AJCC 8th edition and Li and Sali staging systems were used for staging tumors. All variables were categorized and correlated with lymph node metastases and overall survival (OS). All continuous variables were analyzed using the One-Way ANOVA test and categorical variables by Chi-square or Fisher's exact tests. The Kaplan–Meier and multivariate Cox regression techniques were used for survival analysis and Receiver operating characteristic (ROC) curves were generated to find the efficacy of staging systems in predicting LN metastases and OS.

Results: Fifty-four patients were found to be eligible for this study. The mean age was 58 years (range 46-72 years). In this study, tumor stage ($p=.016$), clinical lymph node stage ($p=.001$), the involvement of spongiosa ($p=.015$), cavernosa ($p=.002$), LVI ($p=.001$), and PNI ($p=.021$) were found to be the significant predictors of lymph node metastases. When OS at 5 years between T2 and T3 of AJCC 8th edition was compared, it was found to be 91% and 50.1% respectively ($p=0.001$). The presence of LVI ($p=.001$) was found to be the most significant independent predictor of overall survival.

Conclusions: The changes made in AJCC 8th edition T2-T3 staging are relevant, even though the other two newly proposed staging systems prove themselves to be more precise in predicting survival outcomes.