Introduction & Objectives: To evaluate the prognostic factors for survival in patients treated surgically for transitional cell carcinoma of the upper urinary tract (TCC-UUT).

Material & Methods: We retrospectively reviewed the medical records of 87 patients (64 men and 23 women, mean age of 62.2 years) with TCC-UUT who had undergone radical nephroureterectomy at our institution between June 1994 and June 2009. The median follow-up period was 32 months (mean 42.9, range 1-131 months). The prognostic significance of various clinicopathological variables for recurrence-free and cancer-specific survival was analyzed using univariate and multivariate analysis. Bladder recurrence was not considered in the analysis of the recurrence-free survival.

Results: Of total 87 patients, 21 patients (24.1%) developed local recurrence or distant metastasis and 16 patients (18.4%) died during the follow-up period. The 5-year recurrence-free and cancer-specific survival rates were 74.6% and 75.2%, respectively. On univariate analysis, hydronephrosis, T stage, N stage, and lymphovascular invasion were significant prognostic factors for recurrence-free and cancer-specific survival. On multivariate analysis, T stage and lymphovascular invasion were independent prognostic factors for recurrence-free and cancer-specific survival, while hydronephrosis was a significant factor only for cancer-specific survival.

Conclusions: The T stage and lymphovascular invasion are independent prognostic factors for recurrence-free and cancer-specific survival in patients with TCC-UUT treated by radical nephroureterectomy. These findings would be helpful for guiding the decisions about adjuvant therapies and surveillance interval.