

The Impact of Nephroureterectomy with or without Bladder Cuff Excision for Patients with Upper Urinary Tract Urothelial Carcinoma on Bladder Recurrence

Introduction and Objective: The study aims to evaluate the impact of nephroureterectomy (NU) with or without bladder cuff excision for patients with upper urinary tract urothelial carcinoma (UTUC) on bladder recurrence.

Materials and Methods: We retrospectively reviewed 50 patients with UTUC who underwent radical NU in Far Eastern Memorial Hospital between March 2005 and July 2009. The urinary bladder cuff excision or not was identified by the postoperative cystoscopy three months after radical surgery. Patients who had previous or preoperative chemotherapy, previous bladder tumor, previous contralateral UTUC, positive ureter margin or metastatic disease were excluded. Forty patients were analyzed. Tumor location was categorized as renal pelvis or ureter based on the location of the dominant tumor. The association between bladder cuff status and local or intravesical recurrence was evaluated.

Results: Mean recurrence-free survival (RFS) was 23.98 months. Sixteen patients had no bladder cuff excision (group A) and 24 patients had excision (group B). Group A had 4 bladder recurrences and group B had 7 bladder recurrences and 1 local recurrence (Table 1). One low grade and 15 high grade UTUC in group A, and 3 low grade and 21 high grade UTUC in group B were noted. The mean bladder recurrence-free survival of group B (23.67 months) was not longer than that of group A (24.44 months). Statistics reported no significant difference between group A and B on survival analysis ($p=0.762$). On univariate analysis, tumor location, tumor grade, pathologic stage and chronic kidney disease were not associated with worse recurrence-free survival.

Conclusions: NU without bladder cuff excision may not increase risk of bladder recurrence.

Table 1

	Group A, No bladder cuff excision	Group B, Bladder cuff excision
Number	16	24
Low grade	1	3
High grade	15	21
Bladder recurrence	4	7
Mean RFS	24.44 mo \pm 21.38	23.67mo \pm 18.61

RFS= Recurrence-free survival, mo= months