

Significance of Systematic Regional Lymph Node Dissection during Total Nephroureterectomy

Introduction and Objective: We have prospectively performed systematic regional lymph node dissection (SRLND) during total nephroureterectomy (NUx) for all possible cases of upper urinary tract urothelial carcinoma (UUT-UC) since May 2010. We review the significance of the SRLND during NUx.

Materials and Methods: Between May 2010 and December 2011, 17 patients underwent the SRLND during NUx. Median age was 74 years (range 49 to 84) and male/female was 13/4. We decided the SRLND template should be dissected based on the laterality and location of the primary tumors in light of the report by Kakizoe T, et al. The extent of the SRLND usually included as follows; the renal hilar and/or interaortocaval nodes for renal pelvis, nodes from the renal hilar to the aortic bifurcation and/or interaortocaval for upper ureter, nodes from the renal hilar to the common iliac and/or interaortocaval for middle ureter and the pelvic nodes of the ipsilateral side below the aortic bifurcation for lower ureter.

Results: The tumor laterality was 5 and 12 in the right and left side, and the location was 5 and 12 in the renal pelvis and ureter, respectively. Pathological stage was as follows; pTis/a/1/2/3/4 = 1/2/7/4/2/1, pN0/1/2 = 14/1/2. The pathological stage of the pN+ cases was pT2/3/4 = 1/1/1, respectively. Median number of the total removed lymphnodes was 13 (inter-quartile range 11 to 20) [range 6 to 46]. In 2 cases a mild lymphocele occurred postoperatively. Notably, no local recurrence and distant metastasis were found for median postoperative observation period of 12mos (inter-quartile range 6 to 15) [range 3 to 22].

Conclusions: The SRLND may be playing an important role for the control of postoperative recurrence of UUT-UC. Further prospective study is needed to verify the effect of SRLND on postoperative survival.