

TREATMENT OF INVASIVE TRANSITIONAL CELL CARCINOMA OF UPPER URINARY TRACT

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Purpose: To review the treatment results of invasive transitional cell carcinoma of upper urinary tract at Veterans General Hospital-Kaohsiung.

Materials and Methods: From March 1991 to December 1996, 46 patients with invasive transitional cell carcinoma of the upper urinary tract received radical surgery. There were 31 male and 15 female patients. Patient's age ranges between 43 and 82 years. (median: 67). Sixteen patients received post-operative radiotherapy with dosages of 48.6 to 60 Gy (median: 55) to the tumor bed. Fourteen patients received 2 to 12 courses (median: 4) of post-operative chemotherapy using regimens of MVEC (methotrexate, vinblastine, epirubicin, cisplatin) or MCV (methotrexate, cisplatin, vinblastine). Twenty, 21, 5 patients were pathologically staged as T2, T3, T4 (AJCC, 1992), respectively. Four patients had lymph node metastasis pathologically. Twenty four patients had tumor confined to ureter only.

Results: Follow-up duration ranges from 5 to 65 months (median: 32). Overall, 7 patients (15%) developed local recurrence and 16 patients (35%) developed distant metastasis. Overall 5-year survival rate (5 YSR) was 19%, and 5-year disease-free survival rate (5 DFS) was 16%. Negative lymph nodes metastasis and the ureteral tumor only were statistically significant good factors for 5 YSR and 5 DFS. 5 YSR for surgery alone group, post-operative radiotherapy group and post-operative chemotherapy group were 16%, 12% and 37% respectively ($p=0.43$). 5 DFS for the aforementioned treatment arms were 15%, 10% and 27% respectively ($p=0.37$). No severe complications were observed in patients with post-operative radiotherapy. Three out of the 4 patients with lymph node metastasis developed distant metastasis and died. Eight patients had second location tumors, all of which occurred in the bladder.

Conclusions: This study showed relative high incidences of patients developing distant metastasis regardless of treatment arms was given. Negative lymph node metastasis and the ureteral tumor only were good factors for 5 YSR and 5 DFS. The post-operative chemotherapy group had a higher 5 YSR and 5 DFS than the other treatment groups, and the results need further confirmation although it was not statistically significant.

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Key words: Transitional cell carcinoma, Upper urinary tract, Ureteral tumor, Second location tumor