NON-INVASIVE BLADDER CANCER RECURRENCE AFTER BLADDER CANCER RECURRENCE AFTER BLADDER-PRESERVING THERAPY FOR MUSCLE-INVASIVE BLADDER CANCER

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Introduction and Objective:

After bladder-preserving therapy for muscle-invasive bladder cancer, some proportion of patients develop noninvasive recurrence. However, biological behavior and treatment outcome of such recurrence have not been fully elucidated. In the present study, we analyzed non-invasive tumor recurrence after bladder-preserving therapy for invasive bladder cancer.

Patients and Methods:

Patients with muscle-invasive bladder cancer (T2-3N0M0) underwent bladder-preserving therapy consisted of intra-arterial chemotherapy with methotrexate and cisplatin and radiotherapy. Among 83 patients who underwent the treatment, bladders were preserved in 63 cases. During a follow-up period of 51 months, 18 patients (29%) developed intravesical recurrence: Non-invasive bladder cancer recurrence in 15 cases, invasive bladder cancer recurrence in 2 cases. One of the patients with non-invasive recurrence simultaneously developed lung metastasis. In the present study, analysis was performed on the 14 patients with non-invasive recurrence alone.

Results:

The median age of the patients at presentation was 68 years old. Ten patients were male and 4 were female. T stages of the original tumors were T2 in 9 cases and T3 in 5 cases. Histological grades were G2 in 1 case and G3 in 13 cases.

Non-invasive recurrences were developed at a median of 15 months after bladder-preserving therapy. T stages of the recurrent tumors were Tis in 2 cases, Ta in 4 cases and T1 in 6 cases. Histological grades were G2 in 8 cases and G3 in 2 cases. Treatments of the non-invasive recurrences were TURBT alone in 4 cases, TURBT followed by intravesical instillation of Bacillus Calmette-Guerin in 6 cases and cystectomy in 4 cases. Two of 10 cases who were treated by TURBT experienced additional non-invasive recurrence. Finally, 10 patients were alive without tumor and 4 died of other causes. Overall survival rates were not different between patients with non-invasive recurrence and 42 patients without any recurrence (86% and 84% at 5 years, respectively).

Conclusions:

Most of the recurrences after bladder-preserving therapy were non-invasive bladder cancer, which showed no impact on survival. Recurrent tumors were less aggressive than the original ones, and could effectively be managed by conservative treatment.