

ASSESSMENT OF LOWER URINARY TRACT SYMPTOMS AFTER BACILLE CALMETTE-GUÉRIN INSTILLATION THERAPY FOR NON MUSCLE-INVASIVE BLADDER CANCER

Hypothesis / aims of study

Recent studies have shown that intravesical Bacille Calmette-Guérin (BCG) instillation therapy is effective in suppressing recurrence and progression of high-risk non muscle-invasive bladder cancer (NMIBC) [1]. However, it is well known that many patients could not complete their full regimen due to side effects [2]. The main reason of incompleteness of the BCG therapy is either bladder irritability or general symptoms. We examined (1) the lower urinary tract symptoms (LUTS) in NMIBC patients during BCG therapy and (2) the relation between LUTS and the incompleteness of the therapy.

Study design, materials and methods

Fifty NMIBC patients (male; 38, female; 12) were enrolled; 30 received BCG (Immucyst® 81mg/ week) instillation therapy (Group A), and remaining 20 received no adjuvant therapy as control (Group B). Assessment items were (1) LUTS questionnaires (I-PSS, OABSS) and (2) uroflowmetry and post-void residual (PVR). Both groups were assessed at 1, 3 and 6 months after TUR-Bt. We compared the parameters between Group A and B. Moreover, we analyzed the data in relation to the discontinuation of the BCG maintenance therapy.

Results

The non-recurrence rate of our BCG therapy was 93.3% (28/30). Twenty-two out of 30 patients were recurrence free and could be observed over 6 months.

(1) OABSS score improved at 3, 6 months after TUR-Bt in Group B, which shows the natural LUTS change after TUR-Bt. On the other hand, OABSS scores (especially score 1 and 2) remained high even at 6 months after TUR-Bt in Group A (Fig. 1). (2) BCG therapy completed in 50% (11/22) patients in our follow-up period (median: 10 months), and did not complete in the remaining patients. The causes of incompleteness of the therapy were bladder irritability in 7 cases and general malaise in 5 cases, with one suffered from both. In the patients with BCG incompleteness, the I-PSS storage symptom score, QOL score, and daytime frequency and urgency scores of the OABSS were significantly higher than in the patients with BCG completion at 6 months after TUR-Bt (Fig. 2). There were no significant changes in uroflow parameters and PVR in all patient groups.

Interpretation of results

LUTS improved after TUR-Bt, if without any adjuvant therapy. Intravesical BCG instillation therapy caused negative impacts on LUTS of the patients.

Patients with BCG incompleteness showed worse storage symptoms than patients with BCG completion at 6 months. This result suggests that around half of patients undergoing BCG instillation therapy are suffered from higher storage symptoms.

Concluding message

This is the first report that revealed LUTS after TUR-Bt and during BCG instillation therapy. Questionnaires for LUTS may be useful in making decision whether the patients could continue BCG therapy or not.

Figure 1. The changes of OABSS scores after TUR-Bt

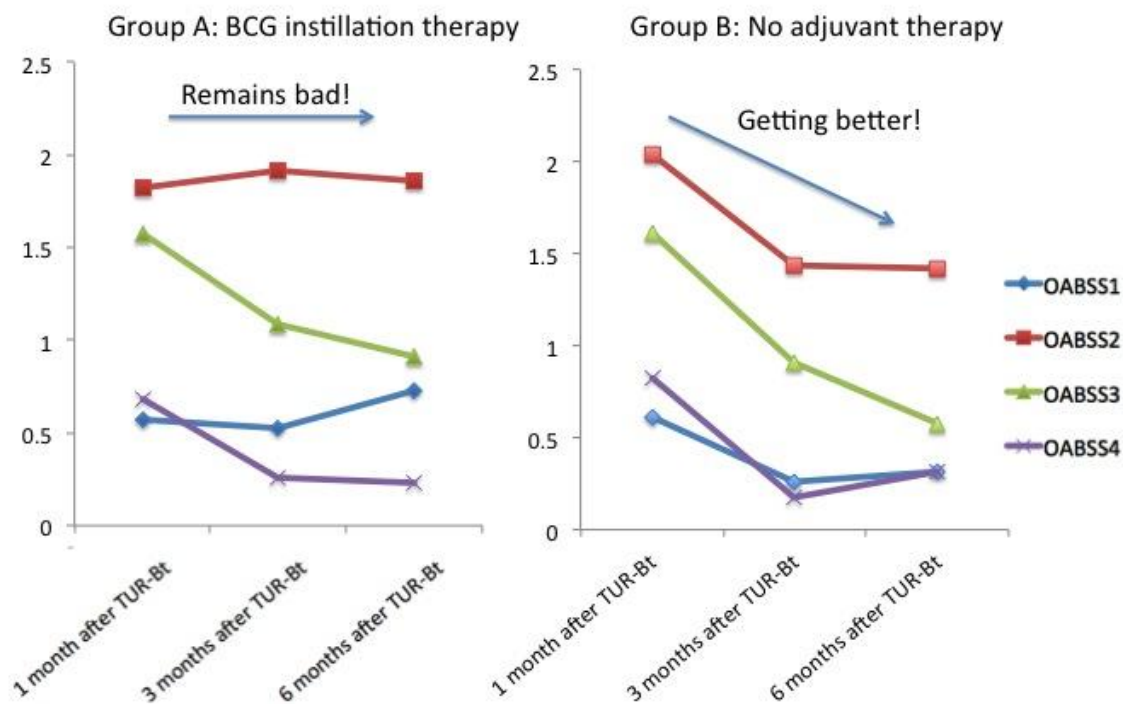
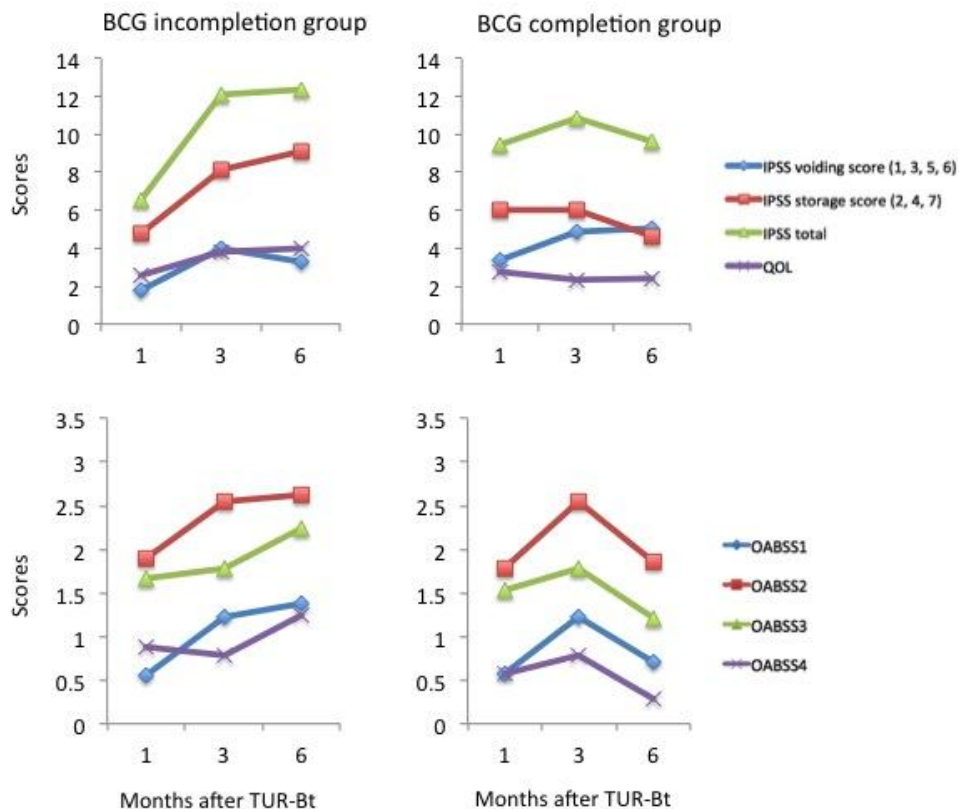


Figure 2. The differences of LUTS scores between BCG incomplection and completion group



References

1. Sylvester RJ et al. J. Urol. 2002; 168: 1964–70.
2. Lamm DL et al J. Urol. 2000; 163: 1124–9.

Disclosures

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