

Investigation of Time Period-Related Differences in Prophylactic Effects of BCG Intravesical Instillation Therapy

Introduction and Objective: The guidelines on treatment options for prophylactic use of BCG against non-muscle-invasive bladder cancer change every few years. We here carried out a retrospective comparison to clarify differences in BCG efficacy by time period.

Materials and Methods: A total of 146 cases of non-muscle-invasive bladder cancer treated with BCG since February 1985 were retrospectively evaluated. All patients received 80 mg of BCG (Tokyo 172 strain) six to eight times a week for prophylactic use. Comparison was made among three historical groups (Group A: 1980s, 39 cases; Group B: 1990s, 61 cases; Group C: 2000s, 46 cases).

Results: In total, recurrence was seen in 55 of the 146 cases (37.7%) and progression in 14 cases (9.6%), 1 patient dying of cancer. These results were similar to those described in previous reports. However, the outcomes of this time period-based analysis indicated a tendency for a shorter time to recurrence in patients after 2000, although a log-rank test showed no significance ($P = 0.229$). Seven of the cases of progression (i.e., half of all such cases) were among the 46 Group C patients (15.2%). Excluding these progressive cases, there was no significant difference among the remaining 132 patients in the three groups.

Conclusions: This study results revealed a trend showing a low non-recurrence rate after 2000. This might stem from a number of factors, including changes in accepted BCG indications and evolution in histopathological diagnostic criteria.

