Câncer de bexiga tratado com PABA e Bacilo de Calmet-Guerin (BCG)


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Department of Urology, Rui Jin Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, China.

PURPOSE: We determined whether intravesical instillation of antifibrinolytic agents could improve the antitumor effect of bacillus Calmette-Guerin. We also investigated the impact of these antifibrinolytic agents on the dose of bacillus Calmette-Guerin required for a therapeutic effect.

MATERIALS AND METHODS: In this randomized, prospective, double-blind, controlled pilot study 257 patients with superficial bladder cancer were randomized into groups A through E. They received 100 to 120 mg intravesical bacillus Calmette-Guerin plus 100 mg para-aminomethylbenzoic acid, 50 to 60 mg bacillus Calmette-Guerin plus 100 mg para-aminomethylbenzoic acid, 100 to 120 mg bacillus Calmette-Guerin plus 2.0 gm epsilon aminocaproic acid, 50 to 60 mg bacillus Calmette-Guerin plus 2.0 gm epsilon aminocaproic acid and 100 to 120 mg bacillus Calmette-Guerin alone, respectively. Prothrombin time and activated partial thromboplastin time of each patient were determined at 2 hours after instillation, and adverse events were evaluated. Tumor recurrence was assessed every 3 months postoperatively by cystoscopy. Median followup was 26.0, 25.0, 24.5, 25.0 and 25.5 months, respectively.

RESULTS: No significant change in prothrombin time or activated partial thromboplastin time was observed, and analysis showed no significant difference in prothrombin time or activated partial thromboplastin time among groups A through E (p = 0.693, 0.756). Recurrence rates at a minimum of median 2 years were 10.6%, 11.1%, 10.0%, 9.3% and 31.8% in groups A through E, respectively. The log rank test showed that recurrence-free probability was statistically different comparing groups A, B, C and D with group E, respectively (p = 0.023, 0.037, 0.031 and 0.020), while pairwise comparisons among groups A, B, C and D showed no significant differences (each p >0.05). The rate of serious adverse events in groups A through E was 9.6%, 3.9%, 15.7%, 5.9% and 13.5%, respectively. However, the differences were not significant (p = 0.222).

CONCLUSIONS: Intravesical instillation of para-aminomethylbenzoic acid or epsilon aminocaproic acid is a more effective and safer method to improve the bacillus Calmette-Guerin antitumor effect, and can reduce the dose of bacillus Calmette-Guerin with the same effect as the full dose.

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Clinical investigation on the effect of intravesical instillation of antifibrinolytic agents with bacillus Calmette-Guerin on preventing bladder cancer recurrence


Department of Urology, Sir Run Run Shaw Hospital of Medical School, Zhejiang University, Hangzhou 310016, China.

OBJECTIVE: To investigate the effect of intravesical instillation of antifibrinolytic agents with bacillus Calmette-Guerin (BCG) on preventing recurrence of superficial bladder transitional cell carcinoma (BTCC) after surgical management. METHODS: A total of 326 cases of superficial BTCC undergoing transurethral resection of bladder tumor (TURBT) or partial cystectomy were divided into 5 groups. Then the different dosage BCG with or without antifibrinolytic agents was regular instilled into bladders (once a week, then once a month after 6 times). Group A including 66 cases received intravesical instillation of 100-120 mg BCG plus 100 mg para-aminomethyl benzoic acid (PAMBA). Group B including 64 cases: instillation of 50-60 mg BCG plus 100 mg PAMBA; Group C including 65 cases: 100-120 mg BCG plus 2.0 g epsilon-aminocaproic acid (EACA); Group D including 64 cases: 50-60 mg BCG plus 2.0 g EACA; Group E (control group) including 67 cases: 100-120 mg BCG. All the cases had been followed up for 4 to 69 months (mean, 28.5 months).

Not only was cystoscopy performed every 3 months, but also biopsy was carried out to identify recurrence when necessary. Side effect was recorded after instillation. RESULTS: The rate of tumor recurrence of Group A, Group B, Group C and Group D was 12%, 10%, 9% respectively, which was significantly lower than that of Group E (30%) (chi(2) = 5.699, 6.818, 7.380, 7.867, P = 0.017, 0.009, 0.007, 0.005). And there was no significant difference of tumor recurrence rate between Group A and Group B or between Group C and Group D (Group A and Group C: high dosage BCG plus antifibrinolytic agents, while Group B and Group D: low dosage BCG plus antifibrinolytic agents) (P > 0.05). But the side effects developing in Group B and Group D after BCG instillation were less than those in Group A and Group C.

CONCLUSIONS: The efficacy of BCG on prevention the recurrence of superficial BTCC can be enhanced when combined with antifibrinolytic agents. Even if the dosage of BCG was reduced by half, the efficacy didn't changed. A new approach of low dosage BCG plus antifibrinolytic agents is recommended in the prophylaxis of recurrence of bladder cancer.

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