

## **The Frequency of Surgical Site Infections in Radical Retropubic Prostatectomy Is Not Increasing Regardless of Short Duration of Antimicrobial Prophylaxis**

**Introduction and Objective:** To date, several studies show that single-dose AMP is effective as well as 2 or 3-day duration of AMP in radical retropubic prostatectomy. To reveal the proper duration of AMP for the patients with radical retropubic prostatectomy, we retrospectively analyzed the frequency of surgical site infections (SSI) in that operation.

**Materials and Methods:** We reviewed the incidence of SSI in 357 patients who underwent radical retropubic prostatectomy from 2001 to 2011 in our department. Surgical site infection was defined according to the guidelines of Centers for Disease Prevention and Control (CDC) in United States. Basically, the antimicrobial agents classified into penicillin or 1<sup>st</sup> or 2<sup>nd</sup> generation cephalosporin were used for AMP. The single dose was defined as the administration the antimicrobial agent just before the start of operation and if the surgery continued more than 3 hours, additional single dose was administered. The 2-day AMP was defined as single-dose with additional dose if necessary and administration in post operation day 2. The 3-day AMP was defined as single dose with additional dose if necessary and administration in post operation day 2 and 3. The 3-day AMP was done from 2001 to 2006, the 2-day AMP was done from 2007 to 2010, and single-dose AMP was done from 2010 to 2011. Body mass index (BMI), operating time, total volume of loss of blood were analyzed.

**Results:** In each AMP group, 230 patients were performed by 3-day AMP, 102 patients were done by 2-day AMP and 25 patients were done by single dose AMP. Superficial incisional SSI occurred in 14 patients (4.0%) in total patients. Superficial incisional SSI developed in 10 (4.3%) in 3-day group, 3 (2.9%) in 2-day group and 1 (4.0%) in single dose group, respectively. There was not statistically significant differences in the incidence of SSI among three groups.

**Conclusions:** In the prevention policy of SSI in radical retropubic prostatectomy, the short duration of AMP was no less effective than 3-day treatment in our study.