The role of antibiotic prophylaxis in patients undergoing transurethral resection of prostate (TUR-P) to decrease urinary tract infection

Abstract

Background & Objective: Transurethral resection of prostate (TUR-P) is the Gold standard therapy in benign prostatic hypertrophy (BPH). Urinary tract infections are one of the most important complications of this method. Prophylactic antibiotic regimen and the duration in preventing the infections are controversial. This study was designed to compare three different prophylactic regimens in TUR-P.

Materials & Methods: In this interventional study, patients with sterile urine analysis and culture prior to TUR-P were classified in to three groups (A, B and C). One single-dose Keflin was prescribed before the operation. Four additional doses of Keflin were given to group B patients after TUR-P. Group C was similar to group B but Ciprofloxacin was given to them until catheter removal. Data were analyzed with SPSS-11.5. χ² test and ANOVA were used. P-value less than 0.05 considered significant.

Results: The incidence of positive urine cultures in group A, B and C were 35%, 20% and 11.5%, respectively. No significant relationship was seen between UTI and antibiotic regiments.

Conclusion: There was not any significant relationship between UTI and different regimens; although UTI rate was lower in the group with longer duration of the prophylaxis. Complementary studies are suggested for application of this regimen.

Key Words: TUR-P- BPH- Antibiotic- UTI