

## SINGLE ORAL DOSE OF FOSFOMYCIN TROMETAMOL VERSUS CIPROFLOXACIN FOR UTI PROPHYLAXIS IN INVASIVE URODYNAMICS: A PROSPECTIVE, RANDOMIZED STUDY

### Hypothesis / aims of study

The use of antibiotic prophylaxis in invasive urodynamic studies (UDS) is debatable. However, in clinical practice, in view of post-procedure urinary tract infection (UTI), antibiotics are often prescribed. The study aimed to test the efficacy of a single dose of oral fosfomycin trometamol in preventing urinary tract infection compared to ciprofloxacin in patients undergoing UDS.

### Study design, materials and methods

In a prospective, open-label study, 65 patients undergoing UDS for various indications were randomized into two groups, A and B. Both the study groups underwent pre-administration urine analysis for the presence of UTI, and a clean catch urine was collected for culture. The patients were also instructed for another midstream specimen, 3 days post-procedure, for urine analysis and culture.

Intervention: Group A: a randomly selected group of patients received a single pre-procedure dose of oral fosfomycin trometamol (3gms) 3 hours before the study; and Group B: a randomly selected group of patients received a single pre-procedure dose of oral 500 mg ciprofloxacin 3 hours before the study.

### Results

The post-procedure urine analysis showed increased presence of WBCs in group A (fosfomycin trometamol) compared to group B (ciprofloxacin). Post-procedure, the negative urine cultures reduced from 59% to 20.5% for group A and comparably from 57.7% to 23.1% in group B. Growth was still observed in majority of the patients in both groups (79.5% and 76.9% for groups A and B respectively). There were no major adverse events as a consequence of either of the drugs used in the study.

### Interpretation of results

Out of 65 patients, 45 were females and 20 were males, with an age range from 10 to 75 years (mean 50.32 ± 13.5 years). There were 39 patients in group A and 26 patients in group B. Patients in both the groups were comparable in age and sex distribution. Chi square tests were performed for urine analysis and culture.

### Concluding message

Conclusion: A single dose of both oral fosfomycin trometamol and oral ciprofloxacin were equally ineffective in the prophylaxis against UTI in patients undergoing UDS.

### Key words

Antibiotic prophylaxis, UTI, Urodynamics, Fosfomycin Trometamol, Ciprofloxacin

### References

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### Disclosures

**Funding:** None **Clinical Trial:** Yes **Public Registry:** No **RCT:** Yes **Subjects:** HUMAN **Ethics Committee:** Research committee, unit of biomedical ethics, Faculty of medicine, King Abdulaziz University, Jeddah, Saudi Arabia **Helsinki:** Yes **Informed Consent:** Yes