

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

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