A COMPARATIVE STUDY OF SINGLE-DOSE FOSFOMYCIN AND 5-DAY LEVOFLOXACIN IN FEMALE PATIENTS WITH UNCOMPLICATED LOWER URINARY TRACT INFECTIONS

Hypothesis / aims of study

The aim of the present study was to evaluate the bacteriological and clinical effects of single-dose fosfomycin trometamol (FMT) and 5-day levofloxacin in females with uncomplicated UTIs

Study design, materials and methods

Study Design-Randomized Control Trial

Materials & Methods-

200 female patients between 20 and 62 years of age were enrolled. The most frequently isolated bacterial pathogen in the urine cultures of patients were Escherichia coli (82.3%) and Enterobacter spp. (8.4%). FMT sensitivity was 94% and levofloxacin sensitivity was 59% in Escherichia coli; in comparison, FMT sensitivity was 75% and levofloxacin sensitivity was 50% in Enterobacter spp. Of the 200 patients, 102 were treated with FMT and 98 were treated with levofloxacin.

Results

The clinical remission rate was 83.1% in the FMT group and 77% in the levofloxacin group; the bacterial eradication rate was 86% in the FMT group and 71.5% in the levofloxacin group

Interpretation of results

Pearson's correlation

Concluding message

It was concluded that the use of FMT(as 3gm single dose) is more effective than Levofloxacin(750 mg for 5 days) in treating uncomplicated UTIs in non-pregnant women.

References

- 1. Popovic M, Steinort D, Pillai S, Joukhadar C. Fosfomycin: an old, new friend? Eur J Clin Microbiol Infect Dis 2010; 29: 127– 142
- Kalpana Gupta, Thomas M. Hooton, Kurt G. Naber. International Clinical Practice Guidelines for the Treatment of Acute Uncomplicated Cystitis and Pyelonephritis in Women: A 2010 Update by the Infectious Diseases Society of America and the European Society for Microbiology and Infectious Diseases Clin Infect Dis. (2011) 52 (5): e103-e120 doi:10.1093/cid/ciq257

Disclosures

Funding: NONE Clinical Trial: Yes Public Registry: No RCT: Yes Subjects: HUMAN Ethics Committee: Ethics Comitee, Mahatma Gandhi Medical College, jaipur Helsinki: Yes Informed Consent: Yes