Category :**Infections + antimicrobials**

A203 - ***Evaluation of clinical efficacy of fosfomycin in an urban academic medical center***

H Drone ; K Robinson
Hennepin Healthcare, Clinical Pharmacy, Minneapolis, United States

Introduction:

This study aimed to evaluate the efficacy of fosfomycin for uncomplicated urinary tract infections (UTI) in a single center urban academic medical center. We proposed that the efficacy and sensitivity of fosfomycin has decreased similarly to other first line antibiotics since the publication of the Infectious Diseases Society of America and European Society for Microbiology and Infectious Diseases guidelines in 2011[1]. Because fosfomycin sensitivities are not routinely performed, results of this clinical outcome based study may guide direction of microbiologic testing in an aim to reduce treatment failure with empiric fosfomycin prescribing.

Methods:

This retrospective chart review included adult patients prescribed fosfomycin in the inpatient or outpatient setting at Hennepin Healthcare from January 1, 2019 to October 31, 2021. The primary outcomes were return to clinic, hospital, or emergency department within 30 days for ongoing infection and additional antibiotic courses for UTI within 14 days.

Results:

Eighty four patients with 107 encounters met inclusion criteria. Fosfomycin was prescribed for diagnosis of uncomplicated UTI in 94/107 (87%) of cases and 73/107 (68%) was in relation to a known culture result versus 34/107 (34%) was empirically prescribed. Of cultures collected (n=103), 47% were ESBL producing organisms and 53% were non-ESBL producing organisms. The 30 day return rate for ongoing symptom management was 23% (25/107) and 21% (23/107) received further antibiotics within 14 days.

Conclusion:

Fosfomycin may have worsening clinical cure rates when compared to historical data. Fosfomycin sensitivity testing may be warranted in some patient populations and use must be weighed in relation to other first line agents.

References:

1. Gupta K et al. Clinical Infectious Diseases 52: e103-e120, 2011.