

Guideline for Prescribing of Fosfomycin for *uncomplicated* UTI

1. BACKGROUND

Fosfomycin, a unique phosphonic acid antibacterial, is active against a range of Gram-positive and Gram-negative bacteria including *Staphylococcus aureus* and Enterobacteriaceae, including extended-spectrum beta-lactamase producing Enterobacteriaceae, which are an increasingly common cause of uncomplicated UTI, and are often resistant to several first and second-line antibiotics.

2. INDICATION

Uncomplicated lower urinary-tract infections caused by **resistant** Gram-negative bacteria when other anti-bacterials, such as trimethoprim, nitrofurantoin, co-amoxiclav and pivmecillinam, cannot be used because of resistance or other good clinical reasons such as intolerance/allergy/renal impairment/interactions, etc.

In the Hull and East Yorkshire area fosfomycin is a restricted antibiotic. Use should be reserved for the treatment of *uncomplicated* UTI due to Extended Spectrum Beta-Lactamase (ESBLs) producing Gram-negative bacteria ONLY when prescription is recommended by a Consultant Microbiologist or Consultant in Infectious Disease via telephone call/email or as suggested on a microbiology report or in a clinic letter. It should not be used when other appropriate oral antibiotics can be used and should not be used for other indications.

3. DOSE / DURATION

For patients 12 years and over

Uncomplicated lower urinary tract infections

ONE 3 g sachet, as a single dose.

Fosfomycin is occasionally used long term to prevent recurrent infection – the dose and duration of this prescription will be advised by an infection specialist.

Fosfomycin is supplied as 3g granules which should be dissolved in a glass of water and taken immediately.

Fosfomycin 3g oral sachets are readily available from standard pharmaceutical wholesalers.

4. CONTRAINDICATIONS / CAUTIONS

Avoid use in pregnancy and breast feeding.

Avoid if eGFR less than 10 mL/minute/1.73 m² or patient on dialysis.

Drug interactions

Drugs which increase gastrointestinal motility

Metoclopramide – plasma and urinary concentration of fosfomycin reduced by metoclopramide, avoid concomitant use

Other drugs that increase gastrointestinal motility may produce similar effects.

5. ADVERSE EFFECTS

Common side effects ($\geq 1/100$ to $< 1/10$) – nausea, dyspepsia, diarrhoea, headache, dizziness, vulvovaginitis – it is common for patients to develop lower gastrointestinal disturbance, which is usually relatively mild, in the 24 hours after dosing and patients should be warned of this.

Fosfomycin is an intensively monitored drug, as such any possible adverse effects (including any considered not to be serious) relating to treatment should be reported via the yellow card scheme (www.yellowcard.gov.uk).

Details of contraindications, cautions, drug interactions and adverse effects listed above are not exhaustive. For further information always check with BNF www.bnf.org.uk or SPC (www.medicines.org.uk).

6. INFORMATION TO PATIENT

Patient should be informed of benefits and risks of treatment, including common side effects, in particular lower gastrointestinal disturbance (see above).

Fosfomycin should be taken on an empty stomach (at least 1 hour before or at least 2 hours after a meal), preferably before bedtime and after emptying the bladder.

The granules should be dissolved into a glass of water and taken immediately after its preparation.

Contacts:

Hull University Teaching Hospitals Trust. 01482 875875.

Ask for Infection consultant on call (may be a microbiologist or infectious disease consultant)

York Teaching Hospitals Foundation Trust. 01904 725856.

Ask for Microbiologist on call.

NLAG Foundation Trust. 03033 306999.

For results, extension 306610. For advice extension 306999

APPROVAL PROCESS

Written by:	Marie Miller, Interface Pharmacist
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