Fosfomycin in vitro resistance of *Escherichia coli* from the community

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It is common practice in many places all over Brazil to use fosfomycin in the treatment of uncomplicated urinary tract infections, although resistance profile is not currently well-known in our country.

We would like to report the findings of *in vitro* activity of fosfomycin against 240 non-duplicate consecutive *E. coli* strains isolated from community urinary samples (> 10^5 CFU/mL in October 2009) from Curitiba (Paraná, Brazil). Susceptibility test were performed according to CLSI, using disk diffusion with 200 mg of fosfomycin disk with zone diameter breakpoint as recommended by CLSI.[1] Clinical data were not evaluated and no statistical analysis was performed, considering the descriptive nature of the study.

The susceptibility of *E. coli* to fosfomycin was 98.8% and to other antibiotics ranged from 66.3 - 99.2% as follows: sulfamethoxazole (66.3%), nalidixic acid (78.3%), quinolones (81.3%, including ciprofloxacin, levofloxacin and norfloxacin), amoxicillin/clavulanic acid (88.7%), nitrofurantoin (99.2%) and ceftriaxone (99.2%).

In the present study *E. coli* isolates from patients with urinary infection were highly susceptible to fosfomycin. These data suggest that fosfomycin may be a good alternative for first line antimicrobial treatment of uncomplicated low urinary tract infections.[2] It is well-known that variations in bacterial resistance patterns for *Escherichia coli* occur amongst different populations.[3] It is mandatory for clinicians to be constantly aware of the local bacterial resistance profiles in order to update empirical antimicrobial regimens. Fosfomycin also seems to be a reasonable option for bacteria other than *E. coli*, such as *Enterococcus*.[4] In our area, fosfomycin is a good option, but this cannot be extrapolated to other regions of the country. On going surveillance studies are needed in the country.

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We declare no conflict of interest.

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