

POSTER PRESENTATION

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P022: Antibigrams of consecutive urinary tract samples in elderly

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Introduction

Urinary tract infections are the main indication for antimicrobials in elderly.

Objectives

Despite the treat for resistance dissemination and therapy failure, clinicians are seldom informed on the per patient evolution of antimicrobial resistance in pathogens.

Methods

Laboratory results were obtained from 13 voluntary diagnostic laboratories (12 hospital-associated) in Belgium during the year 2005. Susceptibility profiles were done by Kirby Bauer disk diffusion according to CLSI. The first two urine samples from patients older than 65 year were included.

Results

Following organisms were predominantly isolated (N first samples/N second samples): *E. coli* (7188/1654), *E. faecalis* (1282/403), *P. mirabilis* (1230/313), *K. pneumonia* (673/173), *P. aeruginosa* (293/120), *E. aerogenes* (375/203), *S. aureus* (158/54), *M. morganii* (347/89), Group B streptococci (149/31), *C. freundii* complex (101/29). When comparing first versus second samples antibigrams for *E. coli*, a decrease in susceptibility was found for the following antimicrobial agents: cotrimoxazole -6.9%; nitrofurantoin -2.8%, fosfomycin 0.0%; ciprofloxacin -10.8%; cefuroxime -5.6%; amoxicillin-clavulanic acid -5.6%; ampicillin -10.5%. For *E. faecalis*, marked decreases were found for nitrofurantoin -2.4%; fosfomycin -2.2%; -ciprofloxacin -10.3%; and only mild decreases for amoxicillin-clavulanic acid 0.0%; and ampicillin -1.2%. For *K. pneumoniae* decreases were in the range of -2.9 to -4.1% for cotrimoxazole, ciprofloxacin, cefuroxime and

amoxicillin-clavulanic acid, and was -12.4% for nitrofurantoin. For *S. aureus* and *C. freundii* no decrease (<-0.1%) was seen for nitrofurantoin and fosfomycin. For *E. aerogenes*, decreases of -18 and -12.5% were found for cotrimoxazole and fosfomycin, respectively. *M. morganii* showed in consecutive samples less susceptibility for cotrimoxazole (-16.2%), fosfomycin (-13.0%) and ciprofloxacin (-10.5%), while only a marginal decrease was found for nitrofurantoin (-0.5%).

Conclusion

The resistance selection influence of consecutive samples depends on the antibiotic-bacterium combinations, and thus might be taken into account when empiric therapy guidelines for urinary tract infections in elderly are reviewed.

Disclosure of interest

None declared.

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