

POSTER PRESENTATION

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Serratia Marcescens outbreak on a general pediatric ward in Benin

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Introduction

The consequences of infections with *Serratia marcescens* can be severe, so strategies for prevention are important.

Objective

Our study aimed to examine the resistance in this bacterium and the main factors increasing the risk of cross contamination.

Methods

6-months surveillance was conducted in the pediatric unit in Benin, from June 15th to December 15th, 2009. We examined various specimen obtained from hospitalized children and 940 samples taken from hands of medical personnel, and various hospital surfaces for *Serratia marcescens* presence. Susceptibilities against antimicrobial agents were tested by the disk diffusion method according to NCCLS guidelines. Aggressive infection control measures were instituted.

Results

324/790 (41%) patients were studied; 123 (39%) were infected by *Serratia marcescens*, including septicaemia 65 (52,8%). 121 children were colonized 1 month later after admission. From hospital environment, 108/940 (11,50%) isolates were obtained. Antimicrobial susceptibility testing revealed 56 % strains displaying multiresistance. Comparison of resistance patterns in isolates blood cultures with those from hands of personnel showed similitude in 92% of cases. Infected patients were cohorted and placed on contact precautions. Investigation by the infection control team revealed that the distributors of antiseptic were the main path of *Serratia marcescens* dissemination.

Conclusion

New infection control policies and engineering plans were initiated on the basis of our results. Antimicrobial resistance is particularly harmful to infectious disease management in low-income countries since expensive second-line drugs are not readily available.

Disclosure of interest

None declared.

Note

Also presented as P349.

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