

POSTER PRESENTATION

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Is multi-drugs resistant *Acinetobacter baumannii* epidemic spread related to reduced susceptibility to biocides?

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Introduction / objectives

Aim of this study was to assess the role of active extrusion in mediating decreased susceptibility to biocides in the persistence and spread of multi-drugs resistant of *A. baumannii* strains isolated in intensive care units of a tertiary-care teaching hospital.

Methods

67 clinical and 24 environmental strains isolated from 2007 to 2010 were genotyped by PFGE, MLST and REP-PCR. Multiplex PCRs were performed for identification of the *ompA*, *csuE* and *bla*_{OXA-51like} sequence type groups. The antimicrobial susceptibility was determined and the presence of carbapenemase-encoding genes was analysed by characterization of the *bla*_{OXA} genes. Chlorine susceptibility was analysed according to BS EN 1040:1997

Results

The cross-analysis of genotyping methods allowed to group strains into 4 clones, only the clone A belonging to the Group 1 corresponding to European II clonal complex and the clone B belonging to Group 2 clonal complex European I. Since 2008, a new variant of clone A has emerged as the predominant clinical and environmental strain, resulting positive for the presence of the carbapenemase OXA-58 plasmid-mediated and showing reduced chlorine susceptibility *in vitro*

Conclusion

Multi-antibiotic resistance may not be the only strategy applied by *A. baumannii* to spread and persist in health-care setting, but also the increased resistance to biocides

Disclosure of interest

None declared.

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