

POSTER PRESENTATION

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Distribution of carbapenem resistant *Acinetobacter Baumannii* and *Pseudomonas aeruginosa* and ESBL-producing organisms colonization among intensive care patients

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Introduction / objectives

Infection with carbapenem resistant *A. baumannii* (CR-AB) and *P. aeruginosa* (CR-PS) as well as ESBL-producing organisms have caused high rate of mortality. This project was aimed to survey the prevalence of drug resistant organisms colonization in critical care patients as a part of infection control program.

Methods

Perianal swab, urine (from Foley's catheter) and endotracheal catheter (ET) were collected from patients who were admitted to intensive care units of a 1000-bed hospital. Isolation of CR-AB and CR-PS was using EMB agar containing 12 ug/ml of either imipenem or meropenem. The MacConkey agar containing 1 ug/ml of cefotaxime was used for screening of ESBL-producing organisms. The MIC of these organisms was performed using THANF customised panel (Sensititre, UK).

Results

A total of 81 isolates was detected from 39 patients. There were 53, 22 and 6 isolates of ESBL-producing organisms, CR-AB and CR-PS, respectively. Perianal was found to be the most common site for colonisation with ESBL-producing organisms (45/60 isolates) while 8 of 14 isolates from ET were CR-AB. All CR-AB isolates resisted to nearly all tested antibiotics. However, all isolates were susceptible to colistin and tigecycline with the MIC₉₀ at ≤ 1 and 1 ug/ml, respectively. In contrast, the ESBL-producing organisms remained susceptible to all

tested carbapenems. Nevertheless, 68% of these isolates resisted to fluoroquinolones.

Conclusion

This project is a part of implementation of hospital-acquired infection control policy. The data demonstrated the existing of various multiple-drugs resistant organisms in critical care patients which would be a challenging task for infectious control.

Disclosure of interest

None declared.

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