

ORAL PRESENTATION

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Prevalence and acquisition rate of extended spectrum beta lactamase producing gram-negative organisms (ESBL-GNO) in general medical patients in Switzerland

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From International Conference on Prevention & Infection Control (ICPIC 2011)
Geneva, Switzerland. 29 June – 2 July 2011

Introduction / objectives

We aimed to determine the prevalence and acquisition rate of ESBL-GNO amongst patients admitted to general medical units at our hospital.

Methods

Patients consecutively admitted to 13 medical wards from March-June 2010 were screened for ESBL-GNO via rectal swab within 48 hours of admission, and 36 hours of discharge.

Results

Of 1967 patients, swabs were obtained in 1111 (56%) at admission and 491 (25%) at discharge with 441 (22%) having both. Mean age was 64 years and 58% were male. 6.8% (75/1111) of patients were positive for an ESBL-GNO at admission of whom 86%, for whom data were available (24/28), had an ESBL-GNO detected in the previous 6 months. 3.7% (18/487) of patients acquired an ESBL-GNO, having positive cultures at discharge but not at admission. On univariate regression, acquisition of an ESBL-GNO was associated with admission from home (OR 0.2 [95% CI 0.1-0.6], $p=0.005$), transfer from another unit (OR 8.3 [95% CI 2-33], $p=0.003$) and receipt of a first or second-generation cephalosporin (OR 7.2 [95% CI 1-37], $p=0.017$). Receipt of a first or second-generation cephalosporin was the only factor independently associated with ESBL-GNO acquisition (OR 7.1 [95% CI 1-40], $p=0.03$). Age, sex, intensive care,

provenance and receipt of other antibiotics were not associated with ESBL carriage or acquisition.

Conclusion

Carriage and acquisition of ESBL-GNO is a problem amongst medical patients at our hospital. No risk factors for ESBL-GNO carriage were identified.

Disclosure of interest

None declared.

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Published: 29 June 2011

doi:10.1186/1753-6561-5-S6-O24

Cite this article as: Pasricha et al.: Prevalence and acquisition rate of extended spectrum beta lactamase producing gram-negative organisms (ESBL-GNO) in general medical patients in Switzerland. *BMC Proceedings* 2011 5(Suppl 6):O24.

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