



POSTER PRESENTATION

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P006: Highlights in bloodstream infections: where does the patient acquire the infection?

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From 2nd International Conference on Prevention and Infection Control (ICPIC 2013) Geneva, Switzerland. 25-28 June 2013

Introduction

Bloodstream infections (BSI) still account for significant morbidity and mortality.

Objectives

The objective of this study was to describe the epidemiology, etiology, sources and adequacy of empiric antimicrobial treatment in BSI.

Methods

A retrospective study about all BSI diagnosed during one year. The pattern resistant pathogen study was EPINE-EPPS project.

Results

340 patients were included. Median age was 74.5 years [interquartile range (IQR), 58.5-80.5]; acute physiology and chronic health evaluation (APACHE II) score was 13 (IQR, 7-29).

BSI were community-acquired in 56% of the cases. The most common source of BSI was urinary tract (48.3%), intra-abdominal (25.6%) and lower respiratory tract infections (18.6%). The most commonly isolated microorganisms were: *Escherichia coli*, *K. pneumoniae*, *S. aureus* (15% oxacilin resistant) and *S. pneumoniae*. The 8.6% of enterobacteracea family produced extended-spectrum B-lactamasas (ESBLs). Inappropriate treatment was observed in 24.5% and crude mortality rate was 7.7%.

28% BSI were nosocomial-acquired. The sources of BSI were unknown in 31.7% of the cases and catheter-related in 25.7%. The secondary sources of BSI were intra-abdominal in 57% of the cases. The most common isolated microorganisms were: *S. epidermidis* and other coagulasa negative, *Candida*, *S. aureus* (36% oxacilin

resistant) and *E. coli*. 25% of enterobacteracea family were ESBLs. We found 5 BSI caused by *Acitetobacter carbapenem* (CPM) resistant and 2 BSI by *P. aeruginosa* CPM resistant. Inappropriate treatment was observed in 52.5% and mortality rate was 28.7%.

Health-care related BSI produced 15.1% of the cases. The source of BSI were unknown in 22.6% and catheter-related in 11.3%. The secondary sources of BSI were urinary tract (60%), intra-abdominal (31.4%) and respiratory tract infections(8.6%). The most common microorganisms were: *E. coli*, *S. aureus* (25% oxacilin resistant), *S. epidermidis* and *K. pneumoniae*. Inappropriate treatment was noticed in 34% and mortality rate was 17%.

Conclusion

The knowledge of local epidemiology is a capital information to improve empiric antimicrobial treatment and to reduce mortality-related inappropriate treatment.

Disclosure of interest

None declared.

Published: 20 June 2013

doi:10.1186/2047-2994-2-S1-P6

Cite this article as: Rodriguez-Aguirregabiria et al.: P006: Highlights in bloodstream infections: where does the patient acquire the infection? *Antimicrobial Resistance and Infection Control* 2013 **2**(Suppl 1):P6.