**ANTIMICROBIAL RESISTANCE &
INFECTION CONTROL**

POSTER PRESENTATION

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P097: Antimicrobial usage in the treatment of patients with bloodstream infection

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Introduction
Although indiscriminate use of broad-spectrum antibiotics is related to the occurrence of bacterial resistance, there is an abusive use of such drugs.

Objectives
To determine the antimicrobial usage in the treatment of patients with bloodstream infection (BSI) caused by methicillin-resistant and susceptible *Staphylococcus aureus* (MRSA and MSSA, respectively).

Methods
Retrospective cohort study performed in an Intensive Care Unit of a large hospital in Belo Horizonte. The population is comprised of patients diagnosed with *Staphylococcus aureus* BSI from 2007 to 2011. Data were obtained through patients' medical records and Hospital Infection Control Committee. Therapy were categorized in: empirical treatment (before the culture test result) or directed (according to the BSI causing agent). Descriptive and univariate analysis were performed (using chi-square test or a Fisher's exact test). The hospital's Ethics Committee approved the project.

Results
62 patients were included, 31 in each group (MRSA and MSSA). The most common antibiotics prescribed for empirical treatment were vancomycin (69.4%), polymyxin B (46.8%), ertapenem (29.0%), meropenem (24.2%) and cefepime (3.2%). There was no significant difference between the groups analyzed and the class of antimicrobials empirically prescribed (p>0.05). For directed treatment, the antibiotics prescribed were vancomycin (45.2%) and methicillin (40.3%). On one hand, MRSA group used significantly more vancomycin (p=0,000). On the other

hand, MSSA patients used more methicillin after the culture result (p=0,000).

Conclusion
A large use of broad-spectrum antibiotics in empirical treatments was observed, given the hospital's microbiological profile and the need to initiate appropriate treatment during the first 24 hours. However, the treatment targeting favored a rational use of antibiotics, reducing the action spectrum after culture results.

Disclosure of interest
None declared.

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