

TITLE: MICROBIAL PROFILE RESISTANCE SURVEY IN ISOLATES OF POSITIVE HEMOCULTURE

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ABSTRACT:

Hospital infections are involved with the main causes of morbidity, and mortality in patients hospitalized in hospital units. This study aimed to identify the microbiological and resistance profile in positive blood cultures in patients admitted to the Pernambuco Cardiac Emergency Department – PROCAPE. Blood samples from the year of 2017 were analyzed. The samples sent to the laboratory were from the intensive care units UCO's 1 and 2, URCT and the hospitalization were processed in the automation equipment Vitek 2 compact from Biomerieux where the identification and antibiogram with the groups of beta lactam antibiotics, aminoglycosides, quinolones, sulfonamides, glycopeptides and carbapenems were made. In a total of 3,323 culture blood samples received, 127 (3.82%) positive, of *Staphylococcus haemolyticus* 17 (14.16%) were isolated; *Staphylococcus aureus*, 10 (7.87%); *Staphylococcus hominis*, 7 (5.51%); *Staphylococcus epidermitis*, 16 (12.59%); *Staphylococcus capitis*, 2 (1.57%); *Staphylococcus lugdunensis*, 1 (0,78%); *Staphylococcus saprophyticus*, 3 (2.36%); *Staphylococcus warneri*, 3 (2.36%); *Enterococcus faecalis*, 8 (6.29%); *Enterococcus faecium*, 1 (0.78%); *Streptococcus mitis / oralis*, 2 (1.57%); *Candida parapsilosis*, 7 (5.51%); *Serratia marcescens*, 7 (5.51%); *Enterobacter cloacae*, 2 (1.57%); *Morganella morganii*, 1 (0.78%); *Acinetobacter baumannii*, 13 (10.23%); *Klebsiella pneumonia*; 18 (14.17%); *Achromobacter xylosoxidans*, 2 (1.57%); *Pseudomonas aeruginosa*, 6 (4.72%). Therefore, there was a prevalence of coagulase negative *Staphylococcus*, followed by *Klebsiella pneumonia* and *Acinetobacter baumanii*. Regarding the resistance profile, they presented to more than one group of antibiotic states. Although *Acinetobacter baumanii* was not the most prevalent among isolates, it presented resistance of 76.92% to four of the groups of antibiotics, carbapenemic, beta lactams, quinolones and aminoglycosids. *Klebsiella pneumonia* also presented resistance similar to the antibiotics mentioned with 55%, in addition to ESBL positive in 5 samples (27.7%). *Staphylococcus coagulase negative* isolates showed resistance to β -lactams of 74%, also showed some degree of resistance to quinolones, sulfonamides and aminoglycosides. In view of these results, it was possible to identify among the microorganisms isolated the multiresistance profile of the tested antibiotics.

Keywords: Sepsis, Blood Culture, Drug Resistance, Microbial

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