

TITLE: RETROSPECTIVE EPIDEMIOLOGIC SURVEY OF BLOODSTREAM INFECTIONS AT A PUBLIC HOSPITAL IN JATAÍ-GO.

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ABSTRACT:

Blood infections refers to the presence of microorganisms into the bloodstream. The hemoculture, a technique wich consists of culturing these pathogens in appropriate methods of blood samples, can be used as diagnostic. A catheter-tip culture is made when there is suspicion of infection coming from this device. Some factors, such as advanced age or immune deficiency contributes to infection. This study aimed to perform a retrospective survey of data on a prevalence of etiological agents of blood infections in patients attended at a public hospital in the city of Jataí, state of Goiás, between January of 2011 and December of 2014. Were evaluated all positive reports for blood cultures and catheter-tip cultures, as well as the results of the antibiogram in both exams. The simple frequency of each pathogen and their resistance rates were calculated. The following variables were analyzed: Age, sex, identified pathogens, resistance rates, production of betalactamases, production of broad spectrum betalactamases, inducible resistance to macrolides, and the site where the sample were collected. In both exams, the predominant age group was sixty years or older, and the highest rate of blood infections was among males. *Staphylococcus epidermidis* were the most prevalent bacteria, followed by *Staphylococcus aureus*. Most of the bacteria were resistant to Ampicilin, in the same way that the resistance of *Staphylococcus* species to penicilin, erythromycin and oxacilin were high. The major producers of broad spectrum betalactamases were *Escherichia coli* and *Klebsiella pneumoniae*. Erythromycin induced resistance to Clindamycin in *S. epidermidis* and *S. aureus* was detected. In the blood culture samples, most of the patients were in the ICU (UTI) at the time of the sampling, and in the cateter tip cultures, they were present at the hospital. It is concluded that bacterial resistance to antimicrobials is a worrisome public health fator, and with the production of betalactamases by several bacteria, it is necessary to use inhibitors of these enzymes in combination with antimicrobials to increase the bactericidal activity. In addition, age and other factors such as decreased immune defense make it possible for individuals with 60 years of age, or older, to have a greater predisposition to blood infections.

Keywords: Blood Infections, Hemoculture, Catheter-tip, Bloodstream.

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