

TITLE: PREVALENCE AND ANTIMICROBIAL SUSCEPTIBILITY PROFILE OF ISOLATED BACTERIA OF HEMOCULTURES FROM A MATERNITY IN ARACAJU - SE.

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ABSTRACT:

Hospital infections are responsible for the increase of morbidity and mortality, mostly in patients who are under Intensive Care Unit (ICU). Neonates are considered the most susceptible patients to acquire them during hospital staging. Among the infections that affect the nosocomial patients are the bloodstream infections (BSI). This study aims to determine the prevalence of bacteria in neonatal hemocultures of the neonatal intensive care unit (NICU) of a public maternity unit, as well as to demonstrate its antimicrobial susceptibility profile. This is a study with retrospective data obtained from January 2016 to January 2018, through consultation in the microbiology database of a Laboratory in Aracaju / SE, which works for the maternity institution. Blood cultures were analyzed by the automated BD Bactec® 9050 system and for the positive samples, the microorganisms were isolated through the blood agar and MacConkey culture media. The criteria for phenotypic identification was followed as recommended by ANVISA. Then, the antimicrobial susceptibility test was performed using the diffusion disc method and interpreted according to the criteria established by the Brazilian Committee on Antimicrobial Susceptibility Testing. Of the 2,345 analyzed samples, 5.5% were positive for bacterial growth and 94.5% negative. Among the positive samples, the most prevalent agents were *Staphylococcus* spp. negative coagulase (43.9%) presenting resistance to Penicillin, Cefoxitin and Erythromycin; *Enterobacter* spp. (17.8%) with sensitivity to Carbapenems; *Staphylococcus aureus* (9.2%) with sensitivity to Vancomycin and Teicoplanine; and *Pseudomonas* spp. (7.7%) with sensitivity to Polimixin. Among the major bacteria that can cause BSI are *Staphylococcus* spp. coagulase negative, presenting *Staphylococcus epidermidis* as the main agent. Despite being considered as a contaminant agent, it has been shown to be pathogenic besides to present, in this study, a high resistance rate to the antimicrobials used. The analysis of the results indicates that it is relevant to give more attention to these cases, in order to avoid the propagation of multiresistant strains. The study of bacterial epidemiology offers important resources that should be worked out with the Hospital Infection Control Commission.

Keywords: Bloodstream Infections. Neonates. Blood culture.