

TITLE: PREVALENCE ASSOCIATED WITH THE RESISTANCE PROFILE IN *Staphylococcus sp.* ISOLATED FROM PATIENTS AT A PUBLIC HOSPITAL IN DOURADOS/MS.

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ABSTRACT:

Bacteria of the genus *Staphylococcus sp.* resistant to methicillin are constantly associated with multiresistance profiles and are a major concern in infections related to health services in Brazil. The aim of this study was to verify the prevalence associated with the resistance profile in *Staphylococcus sp.* isolated from patients at a public hospital in Dourados/MS. This is a cross-sectional study conducted between August 2016 and March 2017. The bacterial identification was performed by the Phoenix® automated system (BD) and the resistance profile through the Minimum Inhibitory Concentration technique by broth microdilution method. As inclusion criterion, only samples that showed an oxacillin resistance profile were used. Data collection was performed through the analysis of records of infected patients, and the characteristics such as age, genre, hospital ward, isolated species and antibiogram were stratified. A total of 110 bacterial samples were isolated, of which the most prevalent were *S. epidermidis* 46 (41.8%), *S. haemolyticus* 35 (31.8%) and *S. aureus* 9 (8.2%). Among the hospital wards, the highest prevalence was in the intermediate unit 32 (29%), hospitalization 24 (21.8%), neonatal ICU 19 (17.2%) and emergency room 18 (16.36%). Regarding to genre were observed 59 female (53.64%) and 51 male (46.36%). The highest prevalence in relation to the age group was from 01 to 28 days 57 (52%) and from 29 days to 11 years 21 (26%) and over 60 years 14 (13%). The main culture sites were blood culture 71 (64.5%), catheter tip 20 (18.2%) and uroculture 9 (8.2%). Regarding bacterial resistance, the highest prevalence was observed between 5 to 7 classes of antibiotics 39 (36%), followed by 4 classes 26 (23%), 3 classes 19 (18%), 2 classes 15 (13%), 1 class 11 (10%). Paying attention to the frequency and increase of infections caused by resistant *Staphylococcus sp.* in hospitalized patients, the study traced the profile of bacterial resistance, associating each clinical picture of each patient and observing the clinical evidences of infection. This can contribute to preventive actions in the control of hospital infections caused by multiresistant microorganisms, providing a better patient care and promoting early diagnosis and initiation of appropriate antimicrobial therapy.

Keywords: *Staphylococcus sp.*; resistance profile, hospital infection.

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