TITLE: PROFILE OF ANTIMICROBIAL RESISTANCE OF ISOLATES OF Staphylococcus aureus

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ABSTRACT

Staphylococcus aureus is a pathogen of significant relevance due to its high pathogenicity. The clinical manifestations caused by this bacterium range from skin infections to septicemia. S. aureus is part of the amphibionic microbiota, mainly colonizing the skin and oropharynx, which facilitates its dissemination among the population. The preparation of food without proper hygienic-sanitary control can lead to contamination of the food, leading to food poisoning. The objective of this study was to characterize the antimicrobial resistance profile of strains of S. aureus isolated from food handlers. The sensitivity profile of S. aureus was detected by the disc diffusion method according to the BrCast protocol (2018). Sixteen strains of S. aureus were collected at three sites: hands, nasopharynx and oropharynx. These isolates were submitted to hospital use antibiotics oxacillin, erythromycin, imipenem and tetracycline for 48 hours, with reading every 12 hours. There was a 100% total resistance of the strains to oxacillin and imipenem. For erythromycin only the nose isolates reached 100% resistance, those from the hands had a resistance percentage of 66%, while those of the oropharynx reached 50% resistance. The tetracycline isolates from the hands were 100% resistant, whereas those from the oropharynx and nasopharynx obtained 50% and 70% resistance, respectively. The results show that there are S. aureus strains disseminated in the community that works in the field of food handling, with high potential to cause infections and serious poisoning. The high resistance index of the tested strains suggests that the population makes indiscriminate use of these antimicrobials, corroborating for the increase of the microbial resistance. Thus, it is clear the need to incorporate measures of control to the indiscriminate use of the antibiotics by the population, besides increasing the hygienic rigor on the part of the food manipulators.

Keywords: Microbial resistance, amphibionic microbiota, hygienic-sanitary control

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