

TITLE: STAPHYLOCOCCUS AUREUS MULTIRRESITENTE SURVEILLANCE IN A HOSPITAL MUNICIPAL MINEIRO

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ABSTRACT:

Staphylococcus aureus is a bacteria responsible for a wide variety of infections and when resistant to methicillin/oxacillin are endemic in many Brazilian hospitals, and vancomycin has been fundamental in the treatment of infections by these microorganisms for many years, including other drugs such as Macrolides (Erythromycin and azithromycin), lincosamides (clindamycin), and group B streptogramins (quinupristin and dalfopristine). This study aimed to evaluate the resistance profile of methicillin-resistant *Staphylococcus aureus* isolates from a municipal hospital in Minas Gerais. Screening tests were conducted with 6µg/mL of oxacillin for confirmation of MRSA phenotype, screening with 6µg/mL of vancomycin, including MIC, D test to determine inducible clindamycin resistance and evaluating the sensitivity test to antibiotics by disc diffusion. Samples of *S. aureus*, all with MRSA phenotype, were isolated, mainly respiratory tract (47%) and blood (44%). All samples showed sensitivity to vancomycin with MIC ≤ 2µg/mL. With high resistance to clindamycin, erythromycin and levofloxacin. In 91 samples, 3.3% presented MLSb profile and high resistance especially to the aminoglycoside, β-lactam and quinolone groups. Fortunately, resistance to vancomycin or even decreased sensitivity of *S. aureus* in the study hospital is not yet a reality. But an inappropriate choice of antibiotic therapy, in addition to other reasons, can lead to an increase in resistance rates. The research and monitoring of the resistance of isolated microorganisms in the hospital area is fundamental for the implementation of effective control policies in multiresistant bacteria, which is both collective and individual responsibility, and that the implementation of patient care must be of a quality, prevention policies, such as the correct hand washing techniques, continued discussion as training of the health care workers.

Key words: *Staphylococcus aureus*, resistance, vancomycin, MLSb.

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