

TITLE: *Staphylococcus aureus* ISOLATED FROM THE MICROBIOTE OF THE TOP CHILDREN'S WITH CHRONIC TONSILLITIS

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Humans have a resident and beneficial microbiota, however, factors such as immunity, age, nutritional status and host anatomic site, they may be susceptible to pathologies. The diseases of the upper respiratory tract are a great challenge to the health services and are responsible for many deaths on Brazil, with an important incidence in children, whose hospitalization rate by respiratory problems has grown exponentially. *Staphylococcus aureus* is one of the major transient bacteria that frequently colonize this anatomical site; studies indicate that *S. aureus* may form biofilm. The objective of this study was to isolate *S. aureus* from the upper respiratory tract of children with chronic tonsillitis. The samples from the present study were collected from the nasal cavity, oropharynx and rhinopharynx of children with surgical indication for adenoid and tonsil removal, attended at the Otorhinolaryngology outpatient clinic of a school hospital in Goiânia city, Goiás State, with age from 0 to 12. The collection was performed using sterile swab at the time of surgery. The Isolation was performed and identified according to the manual of detection and identification of bacteria of medical importance of the National Sanitary Surveillance Agency. Among the ten children that participated of this study, the *S. aureus* species were found in 50% of the samples, 45.5% from tonsils, 36.6% from the nasal cavity and 17.9% from the rhinopharynx. The *S. aureus* is a natural colonizer of these three anatomical sites and this fact makes it be considered of the microbiota, but there are studies indicating that *S. aureus* may have penicillin degradation mechanism, which has been shown to be ineffective during the treatment of recurrent tonsillitis. On the other hand, this bacterium has been considered a causative agent of tonsillitis, with high potential of resistance, also demonstrating ability to form biofilm and to produce toxins. This examples show it is necessary to effectively identify the pathogens that cause tonsillitis, so that the treatment is adequate, reducing the risk of the appearance of multiresistant bacteria, reducing the risks to public health.

Key-words: Bacterium; Tonsillitis; Adenoid; Nasal Cavity.