Bacteria Pattern Aerobic and Anaerobic From Surface Swab and Tonsillar Core Culture in Patients With Recurrent Tonsillitis

Daniel Ginting¹*, Abdul Rachman², Linda Adenin², R Lia Kusumawati³,⁴, Mirzan Hasibuan⁴, Harry Asroel², Yusa Herwanto²

¹Resident in Department of Otorhinolaryngology-Head and Neck Surgery, Faculty of Medicine, Universitas Sumatera Utara, Medan, 20155, Indonesia; ²Department of Otorhinolaryngology-Head and Neck Surgery, Faculty of Medicine, Universitas Sumatera Utara, Medan, 20155, Indonesia; ³Department of Microbiology, Faculty of Medicine, University of Sumatera Utara, Jl. Universitas No. 1 Kampus USU Medan 20155, Indonesia; ⁴University of Sumatera Utara Hostpital, Jl. Dr. T. Mansyur No. 66 Kampus USU Medan 20155, Indonesia.

Abstract: Backgrounds: Tonsillitis is the most common disease in otorhinolaryngology both acute and chronic, especially in children. Recurrent tonsillitis is a chronic inflammatory process in the palatine tonsils. Several studies have shown differences in pathogenic flora on surface and tonsillar core. This also causes an increase failure of eradicating germs in acute tonsillitis. Therefore, it falls into chronic stage. Identifying the bacterial organism in acute tonsillitis will guide appropriate antibiotic therapy that can revolutionize the management of chronic tonsillitis. Objectives: To determine the bacteria pattern from surface and tonsillar core in patients with recurrent tonsillitis. Methods: The research is a descriptive with cross sectional study. The sample of the study was patients with recurrent tonsillitis who underwent tonsillectomy surgery at Adam Malik General Hospital Medan and several satellite hospitals in Medan that met the inclusion criterias. Results: This study was attended by 33 recurrent tonsillitis subjects with more male (66.7%) and most of them below 20 years (66.7%). The most type of aerobic bacteria from surface and tonsillar core swabs was Staphylococcus aureus. Antibiotics that are still sensitive to Staphylococcus aureus in tonsillar core swabs are Gentamycin, Tigecycline, Clindamycin, and Inezolid. Antibiotics that are still sensitive to Staphylococcus aureus on surface smears are Tigecycline, Vancomycin, and Erythromycin. The bacteria form surface did not present bacteria from tonsillar core. The most anaerobic bacteria found on both of the surface and tonsillar core were Bacteroides fragilis. Conclusions: The swab cultures taken from the tonsillar surface may not always reveal the real pathogen of the tonsils. In addition, the estimated probability of tonsillar bacteriology by surface swabs varies with the type of the pathogen. Key words: bacteria pattern, swab, surface, tonsillar core, recurrent tonsillitis.

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