

THE DEFFERENCES THE NUMBER OF STAPHYLOCOCCUS SP. COLONIES AND STREPTOCOCCUS SP. COLONIES IN CHILDREN WITH ALLERGIC RHINITIS AND NON ALLERGIC RHINITIS.

PERBEDAAN JUMLAH *Staphylococcus sp.* DAN *Streptococcus sp.* PADA ANAK-ANAK RHINITIS ALERGI DAN NON RHINITIS ALERGI

Studi pada Mukosa Hidung Pasien Anak-anak Rhinitis Alergi

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ABSTRAK

Latar Belakang : Rhinitis alergi adalah penyakit yang disebabkan oleh gangguan inflamasi pada mukosa hidung yang ditandai dengan gejala hidung berair, hidung tersumbat, gatal dan bersin. Mikrobiota berperan penting pada reaksi peradangan rhinitis alergi. Penelitian ini bertujuan mengetahui perbedaan jumlah koloni *Staphylococcus sp.* Dan *Streptococcus sp.* Pada anak-anak rhinitis alergi dan non rhinitis alergi.

Metode : Penelitian observasional dengan metode *cross sectional* menggunakan 56 sampel dibagi 2 kelompok secara *random*, yaitu 28 sampel rhinitis alergi dan 28 sampel non rhinitis alergi. Lima puluh enam subyek dilakukan *swab meatus media* kemudian dikultur untuk dihitung jumlah koloni bakteri *Staphylococcus sp.* dan *Streptococcus sp.* Data kemudian diuji menggunakan uji non parametrik *Mann-Whitney*.

Hasil : Hasil rerata jumlah koloni *Staphylococcus sp.* 38,41 ± 39,62 koloni, sedangkan jumlah *Streptococcus sp.* dengan rerata 5,38 ± 13,66 koloni. Data yang diperoleh dianalisis menggunakan *Mann-Whitney* didapatkan hasil p=0,001 (p<0,05) untuk *Staphylococcus sp.* dan untuk *Streptococcus sp.* didapatkan hasil p=0,211 (p>0,05) yang menunjukkan jumlah koloni *Staphylococcus sp.* lebih tinggi pada penderita rhinitis alergi dibandingkan non rhinitis alergi, sedangkan jumlah koloni *Streptococcus sp.* antara penderita rhinitis alergi dan non rhinitis alergi relative serupa.

Kesimpulan : Hasil penelitian disimpulkan bahwa terdapat perbedaan jumlah koloni *Staphylococcus sp.* Secara signifikan antara kelompok rhinitis alergi dan non rhinitis alergi.

Kata kunci: Rhinitis alergi, mikrobiota, Staphylococcus sp., Streptococcus sp.

ABSTRACT

Background : *Allergic rhinitis is a disease caused by inflammatory disorders of the nasal mucosa that is characterized by symptoms of rhinorrhea, nasal congestion, itching and sneezing. Inflammatory reactions in allergic rhinitis affect the diversity of nasal microbiota. This study aims to determine the differences the number of Staphylococcus sp. colonies and Streptococcus sp. colonies in children with allergic rhinitis and non allergic rhinitis.*

Methods : *Observational study with cross sectional method using 56 samples divided into 2 groups, namely 28 samples of allergic rhinitis and 28 samples of non allergic rhinitis. Each meatus swab media sample was then cultured to count the number of colonies. The data were then tested using the Mann-Whitney non parametric test.*

Results : *The results showed an average number of colonies of Staphylococcus sp. namely 38.41 ± 39.62 colonies, and the average number of Streptococcus sp. 5.38 ± 13.66 colonies. Data obtained were analyzed using Mann-Whitney results obtained $p = 0.001$ ($p < 0.05$) for Staphylococcus sp. and the results were $p = 0.211$ ($p > 0.05$) Streptococcus sp. which shows the number of colonies of Staphylococcus sp. higher in patients with allergic rhinitis than in non allergic rhinitis, while the number of Streptococcus sp. colonies between patients with allergic rhinitis and non allergic rhinitis relatively similar.*

Conclusion : *The results of the study concluded that there were differences the number of Staphylococcus sp. colonies significantly between groups of allergic rhinitis and non allergic rhinitis.*

Keywords: *Allergic rhinitis, mikrobiota, Staphylococcus sp., Streptococcus sp.*