

INTISARI

Medikasi inhalasi anti asma menyebabkan peningkatan plak dan kalkulus serta menurunnya kadar sIgA saliva sehingga terjadi gingivitis. Propolis dengan kandungan flavonoid tinggi bermanfaat sebagai antimikroba, antiinflamasi, penghambat pertumbuhan dan perkembangan plak dan peningkatan sistem imun tumbuh sehingga dapat mempercepat penyembuhan jaringan yang rusak atau luka. Penelitian ini bertujuan untuk menganalisis hubungan kadar sIgA saliva dengan gingival indeks pada anak asma dengan gingivitis sedang sebelum dan sesudah aplikasi propolis.

Penelitian dilakukan bulan September-Oktober 2017 terhadap 11 anak asma dengan gingivitis sedang pada usia 9-11 tahun. Pengambilan saliva dilakukan di RSKP Respira Bantul.

Subyek tidak diperkenankan makan selama 1 jam sebelum pemeriksaan. Pengambilan saliva sebanyak 1,5 mL dengan metode Spitting pada jam 8-11 pagi. Pengukuran gingivitis menggunakan metode Loe dan Silness, dengan kriteria Gingival Indeks 2. Pengukuran sIgA saliva menggunakan *Anti-human sIgA ELISA kit (Elabscience)*

Hasil memperlihatkan rerata kadar sIgA saliva anak asma dengan gingivitis sedang meningkat setelah aplikasi propolis sebesar 0,37ng/mL, dilakukan *Paired T test* dengan $p=0,00$, rerata Gingival Indeks sebelum dan setelah aplikasi propolis menurun sebesar 0,76 dengan $p=0,00$. Hasil uji korelasi *Pearson* pada hubungan kadar sIgA saliva dengan gingival Indeks sebelum aplikasi propolis $r=-0,760$, dan sesudah $r=-0,448$. Penelitian menyimpulkan terdapat peningkatan kadar sIgA saliva dan penurunan skor Gingival Indeks pada anak asma dengan gingivitis sedang sesudah aplikasi propolis serta semakin tinggi kadar sIgA saliva semakin rendah skor Gingival Indeks.

Kata kunci: Asma, Gingivitis Sedang, sIgA saliva, Propolis, skor Gingival Indeks

ABSTRACT

The anti-asthma inhalation medication causes an increase in plaque and calculus as well as decreased salivary sIgA levels resulting in gingivitis. Propolis with high flavonoid content is useful as an antimicrobial, antiinflammatory, growth inhibitor and plaque development and increased immune system grows so as to accelerate the healing of damaged or injured tissue. This study aims to analyze correlation between gingival index and salivary sIgA levels in children with moderate gingivitis before and after application of propolis.

The study was conducted from September to October 2017 to 11 asthmatic children with moderate gingivitis at 9-11 years old. Taking saliva was done in RSKP Respira Bantul and SDN Blunyahrejo

Subjects were not allowed to eat for 1 hour before the examination. Intake of saliva as much as 1.5 mL with Spitting method at 8-11 am. Measurements of gingivitis using the Loe and Silness method, with Gingival Index criteria 2. Measurement of salivary sIgA using Anti-human sIgA ELISA kit (Elabscience)

The results showed the mean saliva level of asthmatic children with gingivitis was increased after propolis application of 0.37ng / mL, Paired T test with $p = 0,00$, mean of Gingival Index before and after propolis application decreased by 0.76 with $p = 0,00$. The result of Pearson correlation test on the relation of saliva sIgA level with gingival index before propolis application $r = -0,760$, and after $r = -0,448$. The study concluded that salivary sIgA level increased and Gingival Index score decreased in asthmatic children with moderate gingivitis before and after propolis application and the higher of salivary sIgA level could cause the lower of Gingival Index score.

Keywords: Asthma, Moderate Gingivitis, Salivary sIgA level, Propolis, Gingival Index score