

## INTISARI

Asma ringan adalah kondisi asma dengan frekuensi serangan yang jarang timbul atau <1x/bulan, intensitas serangan ringan dan tidak memerlukan obat pengendali. Asma berat adalah kondisi asma yang sangat sering timbul, mengganggu aktivitas, dan memerlukan pengobatan. Sekretori Immunoglobulin A (sIgA) merupakan salah satu antibodi di dalam saliva berperan sebagai pertahanan pertama dalam rongga mulut yang mencegah perlekatan mikrobial, menetralkan enzim, toksin dan virus. Penelitian ini bertujuan untuk mengetahui kadar sIgA saliva pada anak penderita asma ringan dan asma berat.

Penelitian dilakukan terhadap 21 subyek dengan pembagian 11 anak asma berat, 10 anak asma ringan dengan rentang usia 9-11 tahun. Pengambilan saliva pada subyek dilakukan di RSKP Respira Bantul, selanjutnya saliva dibawa ke Laboratorium Biologi Molekuler FK UGM untuk dilakukan uji ELISA. Pengambilan saliva dilakukan dengan metode *Spitting* sebanyak 1,5 mL dan dilakukan pada pagi hari dari jam 8-11. Subyek tidak diperkenankan makan 1 jam sebelum pengambilan saliva. Anamnesis dan pemeriksaan klinis dilakukan untuk melihat kondisi rongga mulut, status sosial, dan status gizi. Pengukuran sIgA saliva menggunakan *Anti-human sIgA* ELISA kit (*Elebscience*). Data dianalisis menggunakan *Independent T test*.

Rerata kadar sIgA pada asma ringan yaitu  $0,163 \times 10^3 \mu\text{g/mL} \pm 0,05$ , dan asma berat  $0,162 \times 10^3 \mu\text{g/mL} \pm 0,06$ . Hasil uji dengan menggunakan Independent T Test pada tingkat keparahan asma terhadap kadar sIgA yaitu  $p=0,962$  ( $p>0,05$ ), yang menunjukkan bahwa tidak terdapat perbedaan bermakna. Berdasarkan penelitian tersebut, dapat disimpulkan bahwa tidak terdapat perbedaan antar kadar sIgA saliva pada anak asma ringan dan asma berat.

Kata kunci: Asma ringan, Asma berat, sIgA saliva

## ABSTRACT

*Mild asthma is asthma condition with the frequency of attacks less than 1x/month or uncommon, the intensity of the mild attack and does not require drug control, whereas severe asthma is a condition that is very commonly occurred, disturbing activities, and require medication. Secretory Immunoglobulin A (sIgA) is one of the antibodies in saliva acts as a first line of defense in the oral cavity that prevents the attachment of microbial, neutralizing enzymes, toxins and viruses. This study aimed to analyze the role of the severity of asthma in affecting the salivary sIgA levels.*

*The study was conducted to 21 subjects including 11 children with severe asthma, 10 children with mild asthma aged 9-11 years old. Saliva were collected from subjects in RSKP Respira Bantul, then saliva were taken to the Laboratory of Molecular Biology in FK UGM for the ELISA test. Collecting saliva is done with Spitting method, 1,5 mL and conducted in the morning from 8-11 o'clock. The subject is not allowed to eat one hour before taking saliva. History and clinical examination performed to see the condition of the oral cavity, social status, and nutritional status. Measurement of salivary sIgA using Anti-Human sIgA ELISA kit (Elebscience). Data were analyzed using Independent T test.*

*The mean levels of sIgA in mild asthma is  $0,163 \times 10^3 \text{ ug / mL} \pm 0.05$ , and severe asthma is  $0,162 \times 10^3 \text{ ug / mL} \pm 0.06$ . The test results by using Independent T Test on the severity of asthma on levels of sIgA ie,  $p = 0.962$  ( $p > 0.05$ ), which indicates that there is no significant difference. Therefore it can be concluded that there is no difference between salivary sIgA levels in children with mild asthma and severe asthma.*

**Keyword:** *mild asthma, severe asthma, salivary sIgA*