INTISARI

Penderita talasemia beta mayor memerlukan transfusi darah seumur hidup yang dapat berakibat penimbunan zat besi berlebihan dalam tubuh termasuk di dalam saliva. Hal ini juga berpengaruh pada ph dan laju alir saliva. Kadar besi dalam saliva berpengaruh menghambat karies. Penelitian ini bertujuan untuk mengetahui perbedaan kadar besi, laju alir, dan pH saliva pada anak talasemia beta mayor dengan status karies rendah dan tinggi.

Penelitian observasional dengan pendekatan *cross sectional* dilakukan pada subjek penderita talasemia beta mayor di RSUD Moewardi Solo pada bulan September-Oktober 2018. Subjek terdiri atas 25 orang dibagi menjadi 2 kelompok yaitu kelompok karies rendah (dmft ≤3) dan tinggi (dmft >3). Pengambilan saliva dilakukan pada pagi hari setelah berpuasa minimal 1,5 jam secara *spitting* sampai 5 ml. Pengambilan data berupa kadar besi, laju alir dan ph saliva. Data dianalisis dengan *Mann-Whitney test* pada program SPSS dengan tingkat kepercayaan 95%.

Hasil penelitian menunjukkan kelompok karies rendah memiliki kadar besi (11,3± 3,8) lebih tinggi secara bermakna ($p<0,05$) dibandingkan pada kelompok karies tinggi (2,5± 0,7). Kelompok karies rendah memiliki rerata laju alir saliva (1,1± 0,2) tidak lebih tinggi secara bermakna ($p>0,05$) dibandingkan pada karies tinggi (1,0± 0,1). Kelompok karies rendah memiliki rerata pH saliva (7,7±0,4) lebih tinggi secara bermakna ($p<0,05$) dibandingkan kelompok karies tinggi (6,3±0,3). Disimpulkan bahwa kadar besi dan pH saliva anak talasemia beta mayor dengan karies tinggi lebih rendah dibanding anak dengan karies rendah, namun tidak berbeda pada laju alir saliva.

Kata kunci : Talasemia beta mayor, kadar besi saliva, laju alir saliva, pH saliva

ABSTRACT

Patients suffered from beta major thalassemia received a lifetime of blood transfusions. One of the side effects of blood transfusions is iron accumulation in the body included saliva. This lead to disturbance in the flow rate which is also related to the salivary pH. Salivary iron may prevent dental caries process. The aims of this study was to compare differences in salivary iron level, flow rate, and pH of beta major thalassemia children between low and high caries status.

Observasional analytic research with cross sectional approach was conducted on the children with beta major thalassemia in Moewardi General Hospital Solo, taken by consecutive sampling technique from September to October 2018. 25 subjects were devided into 2 groups which is low group (dmft ≤3) and high group (dmft >3). Approximately 5cc saliva from each subject was collected early in the morning after fasting about 1,5 hours by using the spitting method. Data was conducted on salivary iron level, flow rate, and pH. Data were analyzed by using Mann-Whitney test.

The results showed that in low caries group, the average of iron level (11.3 ± 3.8) were significantly higher (p value < 0.05) than in high caries group (2.5 ± 0.7). The average flow rate in low caries group (1.1 ± 0.2) were not significantly higher (p value > 0.05) than in high caries group (1.0 ± 0.1). The average pH in low caries group (7.7 ± 0.4) were significantly higher (p value < 0.05) than in high caries group (6,3±0,3). As a conclusion, the salivary iron level and pH of beta major thalassemia children with high caries status were lower than those with low caries status. However, in terms of salivary flow rate, there is no significant difference between these two groups.

Keywords: beta major thalassemia, salivary iron level, salivary flow rate, salivary pH