

## INTISARI

Penderita talasemia mengalami gangguan sintesis salah satu rantai beta gen globin, akibatnya pembentukan hemoglobin berkurang. Penderita talasemia beta mayor membutuhkan transfusi rutin dan pemberian kelasi besi. Kedua hal tersebut menyebabkan gangguan fungsi ginjal. Penelitian ini bertujuan mengetahui hubungan antara jumlah transfusi darah dan jumlah kelasi besi dengan kadar ureum darah dan saliva pada anak penderita talasemia beta mayor.

Jenis penelitian adalah observasional dengan rancangan potong lintang. Subyek penelitian adalah pasien anak penderita talasemia beta mayor di RSUD Moewardi Solo. Sampel diambil dengan teknik *consecutive sampling* dari bulan September sampai November 2018. Data jumlah transfusi darah dan jumlah kelasi besi dan kadar ureum darah merupakan data sekunder dari rekam medis. Saliva yang tidak terstimulasi diambil pada pagi hari. Metode pengukuran kadar ureum saliva dengan metode urease. Data dianalisis dengan menggunakan korelasi pearson.

Hasil penelitian menunjukkan jumlah transfusi  $71,9 \pm 34,3$ , jumlah kelasi besi  $61,0 \pm 32,1$ , kadar ureum darah  $4,41 \pm 1,1$  mg/dL, kadar ureum saliva  $35,6 \pm 12,5$  mg/dL. Berdasarkan uji statistik terdapat korelasi positif antara jumlah transfusi darah dan jumlah kelasi besi dengan kadar ureum darah dan saliva, terdapat korelasi positif antara kadar ureum darah dan saliva. Kesimpulan penelitian : (1) semakin tinggi jumlah transfusi darah, semakin tinggi kadar ureum darah dan saliva pada anak penderita talasemia beta mayor ; (2) semakin tinggi jumlah kelasi besi, semakin tinggi kadar ureum darah dan saliva pada anak penderita talasemia beta mayor ; (3) semakin tinggi kadar ureum darah, semakin tinggi kadar ureum saliva.

Kata kunci : Talasemia beta mayor, Kadar ureum darah, Kadar ureum saliva

## **ABSTRACT**

*Patients with thalassemia experience a synthesis of one of the beta chains of the globin gene, resulting in reduced hemoglobin formation. Patients with beta thalassemia major require routine transfusions and iron chelation. Both of these cause impaired kidney function. This study aims to determine the relationship between the amount of blood transfusion and the amount of iron chelation with blood urea and saliva levels in children with beta thalassemia major.*

*This type of research was observational with a cross-sectional design. The research subjects were patients with beta thalassemia major in Moewardi Hospital Solo. Samples were taken by consecutive sampling technique from September to November 2018. Data on the amount of blood transfusion and the amount of iron chelation and blood urea levels were secondary data from medical records. Unstimulated saliva is taken in the morning. Methods for measuring salivary urea levels using the urease method. Data were analyzed using Pearson correlation.*

*The results showed the amount of transfusion was  $71.9 \pm 34.3$ , the amount of iron chelation  $61.0 \pm 32.1$ , blood urea levels  $4.41 \pm 1.1$  mg / dL, salivary urea levels  $35.6 \pm 12.5$  mg / dL. Based on statistical tests there is a positive correlation between the amount of blood transfusion and the amount of iron chelation with blood and saliva urea levels, there is a positive correlation between blood urea and saliva levels. Conclusions of the study: (1) the higher the amount of blood transfusion, the higher the blood and saliva urea levels in children with beta thalassemia major; (2) the higher the amount of iron chelation, the higher the blood urea and saliva levels in children with beta thalassemia major; (3) the higher the blood urea level, the higher the salivary urea level.*

*Keywords : Beta Thalassemia Major, Blood Urea Level, Saliva Urea Level*