

ABSTRAK

HUBUNGAN FREKUENSI TRANSFUSI DARAH PADA PASIEN *THALASSEMIA* TERHADAP KADAR *BILIRUBIN* TOTAL

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Thalassemia merupakan suatu kondisi yang dapat menyebabkan berbagai jenis anemia. Penderita *thalassemia* β mayor mengalami anemia parah yang memerlukan transfusi darah secara teratur sepanjang hidup mereka. Transfusi darah yang dilakukan berulang dalam jangka panjang pada pasien *thalassemia* dapat menyebabkan kelebihan zat besi yang signifikan peningkatan kadar *bilirubin* terjadi karena akumulasi besi yang terjadi secara kronis menyebabkan transferin plasma menjadi jenuh terhadap besi, menyebabkan sebagian besi tidak terikat oleh transferin dan menjadi non-transferin bound iron (NTBI). Penelitian ingin mengetahui hubungan frekuensi transfusi darah pada pasien *thalassemia* terhadap kadar *bilirubin* total. Jenis penelitian berupa *Survey Analitik* dengan rancangan *Cross Sectional*, yaitu melakukan penelitian yang di waktu yang sama mengukur frekuensi transfusi darah dan kadar *bilirubin* total pada pasien *thalassemia* beta mayor. Didapatkan dengan lama frekuensi 2 minggu sekali sebanyak 3 orang (37%) mengalami peningkatan kadar *bilirubin* total dan 5 responden lainnya (62,5%) dengan kadar *bilirubin* total normal. 3 minggu sekali sebanyak 14 orang (58,3%) mengalami peningkatan kadar *bilirubin* total dengan 10 orang lainnya (41,7%) dengan kadar *bilirubin* total normal, dan frekuensi 4 minggu sekali sebanyak 5 orang (55,6%) mengalami peningkatan kadar *bilirubin* total dengan 4 orang lainnya (44,4%) kadar *bilirubin* total normal. Hasil yang didapatkan dari uji *rank spearman* menunjukkan nilai *p-value* 0,825 ($p > 0,05$) disimpulkan dalam penelitian ini bahwa frekuensi transfusi darah tidak berhubungan signifikan terhadap kadar *bilirubin* total pasien.

Kata kunci : *Bilirubin Total, Frekuensi Transfusi Darah, Thalassemia*

ABSTRACT

RELATIONSHIP BETWEEN BLOOD TRANSFUSION FREQUENCY IN THALASSEMIA PATIENTS AND TOTAL BILIRUBIN LEVELS

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Thalassemia is a condition that can cause various types of anemia. People with *thalassemia* β major have severe anemia that requires regular blood transfusions throughout their lives. Repeated blood transfusions performed over a long period of time in *thalassemia* patients can lead to significant iron overload. Increased *bilirubin* levels occur because chronic iron accumulation causes plasma transferrin to become saturated with iron, causing some iron to be unbound by transferrin and become non-transferrin bound iron (NTBI). This study aims to determine the relationship between blood transfusion frequency in *thalassemia patients and total bilirubin levels*. The type of research that will be used in this study is in the form of an *Analytical Survey* with a *Cross Sectional design*, which is to conduct a study that at the same time measures the frequency of blood transfusions and *total bilirubin* levels in *patients with thalassemia beta major*. It was obtained with a frequency of every 2 weeks as many as 3 people (37%) experienced an increase in total *bilirubin* levels and 5 other respondents (62.5%) with normal total *bilirubin* levels. Every 3 weeks, 14 people (58.3%) experienced an increase in total *bilirubin* levels with 10 other people (41.7%) with *bilirubin* level total normal, and the frequency of every 4 weeks as many as 5 people (55.6%) experienced an increase in total *bilirubin* levels with 4 other people (44.4%) having normal total *bilirubin* levels. The results obtained from the *spearman rank test* showed a p-value of 0.825 ($p > 0.05$) concluded in this study that the frequency of blood transfusions was not significantly related to the total bilirubin level of patients.

Keywords : *Total Bilirubin, Blood Transfusion Frequency, Thalassemia*