

ABSTRAK

HUBUNGAN LAMA TRANSFUSI DARAH DAN JUMLAH VOLUME DARAH TRANSFUSI DENGAN KADAR *Alanine Aminotransferase* PADA PASIEN *THALASSEMIA* BETA MAYOR DI RUMAH SAKIT UMUM DAERAH IDAMAN BANJARBARU TAHUN 2024

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Thalassemia adalah penyakit darah genetik umum yang bervariasi di berbagai populasi dunia. Pasien *thalassemia* membutuhkan transfusi darah karena anemia akibat ketidakmampuan tubuh mengatasi penurunan hemoglobin dari eritropoiesis yang tidak efektif. Pada pasien yang rutin menerima transfusi, hemokromatosis bisa terjadi, yaitu akumulasi zat besi pada sel-sel parenkim hati, yang dapat menyebabkan cedera sel-sel hati. ALT banyak ditemukan dalam sitoplasma sel hati, sehingga lebih spesifik untuk mendeteksi kelainan hati. Tujuan dalam penelitian ini untuk mengetahui hubungan lama transfusi darah dan jumlah volume darah transfusi dengan kadar ALT pada pasien *thalassemia* beta mayor di rumah sakit umum daerah idaman banjarbaru tahun 2024. Metode penelitian yang digunakan adalah survei analitik dengan pendekatan *cross-sectional*, melibatkan 41 responden yang dipilih secara purposive sampling. Data dikumpulkan melalui kuesioner dan hasil pemeriksaan laboratorium kadar ALT. Uji analisis statistik yang digunakan adalah uji Rank Spearman. Hasil penelitian menunjukkan 20 responden (48,8%) dengan kadar ALT meningkat dan 21 responden (51,2%) dengan kadar ALT normal. Hasil uji menunjukkan nilai p-value 0,429 ($p > 0,05$) untuk lama transfusi dengan kadar ALT, dan p-value 0,046 ($p < 0,05$) untuk volume darah transfusi dengan kadar ALT. Dari hasil uji statistik dapat disimpulkan bahwa lama transfusi tidak berhubungan dengan kadar ALT sedangkan jumlah volume darah transfusi memiliki hubungan yang signifikan terhadap kadar ALT.

Kata kunci : *Thalassemia Beta Mayor, Transfusi Darah, ALT*

ABSTRACT

THE CORRELATION BETWEEN DURATION OF BLOOD TRANSFUSION AND THE VOLUME OF TRANSFUSED BLOOD ALANINE AMINOTRANSFERASE LEVELS IN PATIENSTTS WITH BETA THALASSEMIA MAJOR AT IDAMAN BANJARBARU GENERAL HOSPITAL IN 2024

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Thalassemia is a common genetic blood disorder that varies across different populations worldwide. Thalassemia patients require blood transfusions due to anemia resulting from the body's inability to cope with decreased hemoglobin caused by ineffective erythropoiesis. In patients who regularly receive transfusions, hemochromatosis can occur, which is the accumulation of iron in the liver parenchymal cells, potentially leading to liver cell injury. ALT is found in the cytoplasm of liver cells, making it more specific for detecting liver abnormalities. The purpose of this study was to determine the correlation between the duration of blood transfusion and the volume of transfused blood with ALT levels in patients with thalassemia beta major at Idaman Regional General Hospital Banjarbaru in 2024. The research method used was an analytic survey with a cross-sectional approach, involving 41 respondents selected through purposive sampling. Data were collected through questionnaires and laboratory assessments of ALT levels. The statistical analysis used was the Spearman Rank test. The results showed that 20 respondents (48.8%) had elevated ALT levels, and 21 respondents (51.2%) had normal ALT levels. The test results indicated a p-value of 0.429 ($p > 0.05$) for the duration of transfusion with ALT levels and a p-value of 0.046 ($p < 0.05$) for the volume of transfused blood with ALT levels. Based on the statistical test results, it can be concluded that the duration of transfusion is not associated with ALT levels, whereas the volume of transfused blood shows a significant correlation with ALT levels.

Keywords : *Beta Thalassemia Major, Blood Transfusion, ALT*