

**TANJUNGPURWA MINISTRY OF HEALTH POLYTECHNIC
DEPARTMENT OF MEDICAL LABORATORY TECHNOLOGY
MEDICAL LABORATORY TECHNOLOGY STUDY PROGRAM
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**Hubungan Lama Transfusi Terhadap Kadar Kreatinin Pada Pasien
Thalasemia Mayor di Rumah Sakit Dr. H. Abdul Moeloek Provinsi Lampung**

XVI + 35 Halaman, 3 Tabel, 3 Gambar, 13 Lampiran

ABSTRAK

Thalasemia merupakan penyakit kelainan darah genetik yang ditandai dengan tidak ada atau menurunnya sintesis salah satu dari rantai α , β dan atau rantai globin lainnya sehingga membentuk struktur normal molekul hemoglobin. Pengobatan yang dilakukan pasien thalasemia yaitu dengan transfusi darah, penumpukan zat besi akibat transfusi akan menyebabkan terbentuknya besi bebas yang dapat mengkatalisis pembentukan *Reactive Oxygen Species* (ROS), hal tersebut dapat mengindikasikan kerusakan ginjal. Penelitian ini bertujuan untuk mengetahui hubungan lama transfusi terhadap kadar kreatinin pada pasien thalasemia mayor di Rumah Sakit Dr. H. Abdul Moeloek Provinsi Lampung. Penelitian ini mencakup bidang imunohematologi yang bersifat kuantitatif desain penelitian yang digunakan adalah korelasi analitik dan menggunakan pendekatan *cross sectional*. Populasi penelitian ini adalah pasien thalasemia mayor sebanyak 83 orang dan sebanyak 32 orang pasien merupakan sampel yang memenuhi kriteria. Hasil penelitian menunjukkan bahwa dari 32 sampel terdapat 2 sampel yang memiliki kadar kreatinin di atas batas normal dengan rata-rata kadar kreatinin pasien berjenis kelamin laki-laki 0,4 mg/dL dan perempuan 0,2 mg/dL, dengan lama menjalani transfusi selama 18 dan 32 tahun. Sampel penelitian ini diolah dengan uji korelasi *spearman* dan didapatkan hasil uji korelasi dengan nilai $p = 0,000$ ($p < 0,05$) dan nilai koefisien korelasi sebesar 0,590 yang menandakan bahwa terdapat hubungan antara lama transfusi terhadap kadar kreatinin pada pasien thalasemia mayor dengan kekuatan korelasi yang sedang.

Kata Kunci : Thalasemia, Transfusi, Reaksi Transfusi, Kreatinin

Daftar Bacaan : 27 (2014-2024)

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***Correlation Between of Long Term Transfusion to Creatinine Levels in Major
Thalassemia Patients at RSUD Dr. H. Abdul Moeloek Lampung Province***

XVI + 35 Pages, 3 Tables, 3 Picture, 13 Attachment

ABSTRACT

Thalassemia is a genetic blood disorder characterized by the absence or decreased synthesis of one of the α , β chains and/or other globin chains so as to form the normal structure of the hemoglobin molecule. Treatment for thalassemia patients is with blood transfusions, the buildup of iron due to transfusions will cause the formation of free iron which can catalyze the formation of Reactive Oxygen Species (ROS), this can indicate kidney damage. This study aims to determine the relationship between transfusion duration and creatinine levels in thalassemia major patients at Dr. Hospital. H. Abdul Moeloek Lampung Province. This research covers the field of immunohematology which is quantitative, the research design used is analytical correlation and uses a cross sectional approach. The population of this study was 83 thalassemia major patients and 32 patients were samples who met the criteria. The results of the study showed that of the 32 samples there were 2 samples that had creatinine levels above the normal limit with an average creatinine level for male patients of 0.4 mg/dL and female patients of 0.2 mg/dL, with a duration of transfusion of 18 and 32 years old. This research sample was processed using the Spearman correlation test and obtained correlation test results with a value of $p = 0.000$ ($p < 0.05$) and a correlation coefficient value of 0.590, which indicates that there is a relationship between the duration of transfusion and creatinine levels in thalassemia major patients with the strength of the correlation currently.

Keywords : *Thalassemia, Transfusion, Transfusion Reaction, Creatinine*

Reading List : *27 (2014-2024)*