

**POLITEKNIK KESEHATAN TANJUNGPURING
JURUSAN TEKNOLOGI LABORATORIUM MEDIS
PROGRAM STUDI TEKNOLOGI LABORATORIUM MEDIS
PROGRAM SARJANA TERAPAN**

Skripsi, Juni 2024

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**PERBEDAAN KADAR HEMOGLOBIN DAN HEMATOKRIT PADA
PRODUK DARAH *PACKED RED CELL* DENGAN METODE
SEDIMENTASI DAN SENTRIFUGASI DI UTD RSUD Dr. H. ABDUL
MOELOEK PROVINSI LAMPUNG**

xi + 41 halaman, 10 tabel, 2 gambar, 19 lampiran

ABSTRAK

Proses pengolahan dan penyimpanan komponen produk *Packed Red Cells* (PRC) harus mematuhi standar pengawasan mutu dengan membuang sebagian volume plasma dari *Whole Blood*. Proses pengolahan darah dapat dilakukan menggunakan dua metode yaitu metode sentrifugasi, dengan memisahkan komponen seluler darah dari plasma menggunakan alat *Refrigerator Centrifuge* (RC), dan metode sedimentasi (pengendapan) dengan didiamkan selama 24 jam di dalam *blood refrigerator* pada suhu 2-6°C. Parameter yang penting untuk diperiksa meliputi kadar hemoglobin minimal 45 gram dan kadar hematokrit 65–75% per kantong. Penelitian ini bertujuan untuk mengetahui perbedaan kadar hemoglobin dan hematokrit produk PRC dengan metode sedimentasi dan sentrifugasi. Jenis penelitian ini merupakan penelitian *quasy eksperiment* dengan desain penelitian *cross sectional*. Sampel dalam penelitian ini yaitu 40 sampel produk PRC metode sedimentasi dan 40 sampel produk PRC metode sentrifugasi. Hasil penelitian kadar hemoglobin didapatkan nilai $p=0,061$ ($p>0,05$), yang berarti tidak ada perbedaan yang signifikan antara kadar hemoglobin dengan metode sedimentasi dan sentrifugasi. Sedangkan untuk kadar hematokrit didapatkan nilai $p=<0,001$ ($p<0,05$), yang berarti ada perbedaan yang signifikan antara kadar hematokrit dengan metode sedimentasi dan sentrifugasi.

Kata Kunci : Hemoglobin, Hematokrit, PRC, Sedimentasi, Sentrifugasi.
Daftar Bacaan : 24 (2011–2023)

**TANJUNGPURBA HEALTH POLYTECHNIC
DEPARTMENT OF MEDICAL LABORATORY TECHNOLOGY
MEDICAL LABORATORY TECHNOLOGY STUDY PROGRAM
APPLIED UNDERGRADUATE PROGRAM**

Thesis, June 2024

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**DIFFERENCE BETWEEN HEMOGLOBIN AND HEMATOCRIT RATES
IN PACKED RED CELL BLOOD PRODUCTS BY SEDIMENTATION
AND CENTRIFUGATION METHODS IN UTD RSUD Dr. H. ABDUL
MOELOEK PROVINCE LAMPUNG**

xi + 41 pages, 10 tables, 2 figures, 19 attachments

ABSTRACT

The processing and storage of Packed Red Cells (PRC) product components must comply with quality control standards by removing part of the plasma volume from Whole Blood. Blood processing can be done using two methods, namely the centrifugation method, by separating the cellular components of blood from plasma using a Refrigerator Centrifuge (RC) device, and the sedimentation method (precipitation) by standing for 24 hours in a blood refrigerator at a temperature of 2-6°C. Important parameters to check include hemoglobin levels of at least 45 grams and hematocrit levels of 65-75% per bag. This study aims to determine the difference in hemoglobin and hematocrit levels of PRC products by sedimentation and centrifugation methods. This type of research is a quasi experiment with a cross sectional research design. The samples in this study were 40 samples of PRC products using sedimentation method and 40 samples of PRC products using centrifugation method. The results of the study of hemoglobin levels obtained $p=0.061$ ($p>0.05$), which means there is no significant difference between hemoglobin levels with sedimentation and centrifugation methods. While for hematocrit levels, the p value = <0.001 ($p <0.05$), which means there is a significant difference between hematocrit levels by sedimentation and centrifugation methods.

Keywords : Hemoglobin, Hematocrit, PRC, Sedimentation, Centrifugation.

Reading List : 24 (2011-2023)