

PERBEDAAN JUMLAH TROMBOSIT SAMPEL DARAH 3 ml DAN 1 ml MENGGUNAKAN TABUNG VACUM

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ABSTRAK

Hasil pemeriksaan jumlah trombosit sangat dipengaruhi faktor-faktor dalam tahapan pre analitik, analitik, dan paska analitik. Tahapan pre analitik meliputi pengambilan darah dan penanganannya, yaitu pemberian antikoagulan EDTA pada sampel darah. Permasalahan pada pengambilan darah dengan tabung *vacutainer* EDTA, sering terjadi jarum *vacutainer* dicabut sebelum tabung vakum berhenti mengisap sehingga takaran antikoagulan EDTA dan volume darah menjadi tidak tepat yang menyebabkan darah menjadi lebih pekat, trombosit akan kemasukan cairan sehingga terjadi pembengkakan kemudian mengalami fragmentasi (pecah) menyebabkan jumlah trombosit meningkat. Penelitian bertujuan untuk mengetahui perbedaan jumlah trombosit sampel darah 3 ml dan 1 ml menggunakan tabung vakum. Jenis penelitian analitik. Penelitian dilaksanakan di laboratorium Universitas Muhammadiyah bulan April-Mei 2018. Obyek penelitian 16 sampel penelitian yang mendapat dua perlakuan, yaitu darah 3 ml, dan darah 1 ml pada tabung vakum EDTA 3 ml. Hasil penelitian diperoleh rerata jumlah trombosit darah 3 ml adalah 252.875 μL , simpang baku 76.254,73 μL , dan jumlah trombosit darah 1 ml adalah 275.500 μL , simpang baku 91.147,50 μL darah. Uji beda Wilcoxon menyimpulkan bahwa terdapat perbedaan bermakna jumlah trombosit darah 3 ml dengan jumlah trombosit darah 1 ml ($p < 0,05$).

Kata kunci : jumlah trombosit, darah 3 ml, darah 1 ml, tabung vakum

THE DIFFERENCE OF TOTAL THROMBOCYTE 3 ml AND 1 ml BLOOD SAMPLE USING VACUUM TUBE

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ABSTRACT

The examination result of total thrombocyte is strongly influenced by factors in pre analytic, analytic, and post analytical stages. Pre analytic stage include blood collection and its handling, that is giving of EDTA anticoagulant on blood samples. Problem on the blood collection with EDTA vacutainer tube, often occurs that vacutainer needle is revoked before the vacuum tube stop sucking so that the EDTA anticoagulant dosage and blood volume become improper which causing the blood become more concentrated, thrombocyte will entered accidentally by the fluid so that swelling happened, then fragmentation (rupture) causing thrombocyte count increased. The research goal was to know the difference of total thrombocyte 3 ml and 1 ml blood sample using vacuum tube. Research type was analytic. The research was conducted at laboratory of Muhammadiyah University in April-May 2018. The research object was 16 research samples which received two treatments, namely 3 ml blood, and 1 ml blood on 3 ml EDTA vacuum tube. The research result obtained average of 3 ml total blood thrombocyte as much as 252.875 μL , standard deviation 76.254,73 μL , and 1 ml total blood thrombocyte as much as 275.500 μL , standard deviation 91.147,50 μL blood. Wilcoxon's different test concluded that there was a significant difference on 3 ml blood thrombocyte amount with 1 ml blood thrombocyte amount ($p < 0.05$).

Keywords: thrombocyte amount, 3 ml blood, 1 ml blood, vacuum tube