

ABSTRAK

Latar Belakang: Kesulitan pengambilan sampel darah pasien sering terjadi pada bayi dan balita. Menyebabkan volume darah tidak mencukupi dan juga dapat menyebabkan perbandingan antikoagulan dan darah menjadi tidak tepat, sehingga dapat mempengaruhi hasil pemeriksaan yang diinginkan.

Tujuan : Mengetahui adanya pengaruh berbagai variasi volume sampel darah dalam tabung vacutainer antikoagulan K₃EDTA terhadap hasil pemeriksaan jumlah trombosit di RSUD Besemah Kota Pagar Alam Sumatera Selatan

Metode : Jenis penelitian ini adalah observasional dengan desain penelitian *Cross-sectional*. Penelitian ini dilaksanakan pada bulan Desember 2022. Jumlah responden sebanyak 5 orang yang di ambil darah vena sebanyak 10,5 ml lalu di masukkan kedalam 6 tabung K₃EDTA masing-masing tabung diisi 0,5 ml, 1,0 ml, 1,5 ml, 2,0 ml, 2,5 ml dan 3,0 ml. Kemudian diperiksa jumlah trombosit masing-masing 5 kali pengulangan menggunakan alat Hematologi Analizer Sysmex XN-350. Kemudian dinalisis statistik menggunakan Non Parametric uji Friedman (*K Related Sampel.*)

Hasil Penelitian: Rerata jumlah trombosit dalam sampel darah berbagai volume 0,5-1,0-1,5-2,0-2,5-3,0 ml adalah 293.720-293.480-304.840-303.080-309.320-318.280/mm³. Hasil penelitian menunjukkan ada pengaruh signifikan/bermakna perlakuan berbagai variasi volume sampel darah terhadap hasil pemeriksaan jumlah trombosit ($0,000 < 0,05$).

Kesimpulan: Ada pengaruh berbagai volume sampel darah dalam tabung vacutainer antikoagulan K₃EDTA terhadap hasil pemeriksaan jumlah trombosit, semakin bertambah banyak volume sampel darah makin meningkat hasil pemeriksaan jumlah trombosit.

Kata Kunci : Pengaruh, volume darah, K₃EDTA, trombosit.

ABSTRACT

Background: Difficulties in taking patient blood samples often occur in infants and toddlers. Causes insufficient blood volume and can also cause the ratio of anticoagulants and blood to be incorrect, which can affect the desired test results.

Objective: To determine the effect of various variations in blood sample volume in K3EDTA anticoagulant vacutainer tubes on the results of examining platelet counts at Besemah Hospital, Pagar Alam City, South Sumatra

Methods: This type of research is observational with a cross-sectional research design. This research was conducted in Desember 2022. The number of respondents was 5 people who took 10.5 ml of venous blood and then put it into 6 K3EDTA tubes, each tube filled with 0.5 ml, 1.0 ml, 1.5 ml, 2.0 ml, 2.5 ml and 3.0 ml . Then check the number of platelets each 5 repetitions using the Sysmex XN-350 Hematology Analyzer. Then statistical analysis using the Non Parametric Friedman test (K Related Samples.)

Results: The average number of platelets in blood samples of various volumes of 0,5-1,0-1,5-2,0-2,5-3,0 ml was 293.720-293.480-304.840-303.080-309.320-318.280/mm³. The results showed that there was a significant/significant effect on the results of examining the platelet count (0,000 <0,05).

Conclusion: There is an effect of various volumes of blood samples in the K3EDTA anticoagulant vacutainer tube on the results of examining the platelet count, the more blood samples the higher the results of the examination of the platelet count.

Keywords: Effect, blood volume, K3EDTA, platelets.