PengaruhVariasi Volume DarahPadaTabung EDTA TerhadapBentukEritrosit

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ABSTRAK

Eritrosit merupakan komponen utama darah selain leukosit, trombosit dan plasma. Sel ini bersifat permeabel terhadap molekul air. Sel darah merah yang dimasukkan dalam larutan hipertonis akan menglami krenasi dan apabila dimasukkan dalam larutan yang hipotonis akan mengalami pembengkakan sel. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh variasi volume darah pada tabung EDTA, antikoagulan yang dipakai adalah EDTA 10%. Jenis penelitian ini analitik, sampel diambil berdasrkan kriteria inklusi sebanyak 30 pasien kemudian dibuat apusan darah masing masing pada sampel 0,5 ml, 1 ml, dan 3,5 ml. Hasil pengamatan bentuk eritrosit pada 10 lapang pandang didapatkan hasil: 0,5 ml darah + 10µl antikoagulan EDTA 10% rata-rata jumlah eritrosit 2581 dipresentasikan 89,83% eritrosit berbentuk krenasi, 1 ml darah + 10µl antikoagulan EDTA 10% rata-rata jumlah eritrosit 2451 dipresentasikan 5% bentuk eritrosit tidak normal, dan 3,5 ml darah + 10µl antikoagulan EDTA 10% rata-rata jumlah eritrosit 2379 dipresentasikan 88,67% bentuk eritrosit membengkak. Hasil uji normalitas *Shapiro-wilk* menunjukkan bentuk eritrosit pada larutan hipertonis, isotonis, hipotonis diperoleh sig. sebesar 0,200 > 0,05, kemudian hasil uji pearson diperoleh p value sebesar 0,000 < 0,05 sehingga dapat disimpulkan bahwa terdapat pengaruh variasi volume darah pada tabung EDTA tehadap bentuk Eritrosit.

Kata Kunci : Variasi volume darah, bentuk eritrosit

Effect of Blood Volume Variations on EDTA Tubes Against Erythrocyte Form

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ABSTRACT

Erythrocytes are the main component of blood besides leukocytes, platelets and plasma. These cells are permeable to water molecules. Red blood cells that are inserted in a hypertonic solution will experience constipation and if inserted in a hypotonic solution will experience cell swelling. The purpose of this study was to determine the effect of variations in blood volume in EDTA tubes, the anticoagulant used was EDTA 10%. This type of research was analytic, samples were taken based on inclusion criteria as many as 30 patients then made blood smears of each sample in 0.5 ml, 1 ml, and 3.5 ml. The results of observations of erythrocyte forms in 10 visual fields showed results: 0.5 ml of blood + 10µl of EDTA anticoagulant 10% on average the number of erythrocytes 2581 presented 89.83% of chitation-shaped erythrocytes, 1 ml of blood + 10µl of EDTA anticoagulants 10% on average erythrocytes 2451 were presented with 5% abnormal forms of erythrocytes, and 3.5 ml of blood + 10µl of EDTA anticoagulants 10% on average the number of erythrocytes 2379 were presented 88.67% of rounded erythrocyte forms swollen and some experienced lysis. The results of the Shapiro-Wilk normality test showed the form of erythrocytes in hypertonic, isotonic, hypotonic solutions obtained by sig. amounting to 0,200> 0,05, then the results of Pearson test obtained p value of 0,000 <0,05 so it can be concluded that there was an effect of variations in blood volume on EDTA tubes against the form of Erythrocytes.

Keywords: blood volume variation, erythrocyte shape