Erythrocyte Morphology Relationship With Decreasing Hematocrit Value On Use of EDTA 10% Volume 50 μl

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ABSTRACT

The hematocrit examination was to determine the volume of erythrocytes in the blood and expressed in percent. The use of anticoagulants on hematologic examination was to prevent blood clotting by binding of precipitating calcium ion. The shrinkage or creation of erythrocytes was on erythrocytes abnormal. The shrinkage could be caused by preanalytic errors such as unbalanced addition of anticoagulant and blood specimen. The aim of this study was to evaluate the correlation between morphology of erythrocytes and decreased of hematocrit value by the used of EDTA 10% volume 50 μl as an anticoagulant. This study was a analytical correlative study with cross sectional approach. 20 of Universitas Muhammadiyah Semarang students were evaluated with either used of 10% volume of EDTA 50 μl and EDTA 10% volume 10 μl as control. The mean hematocrit results obtained by EDTA 10% volume 50μL were 43% and Cell cortation 3.2%. The data obtained then analyzed by using Spearman test, the significant value obtained is 0.006 <0.05 so it can be concluded that there is a morphological relationship erytroset terahadap decrease hematocrit value on the use of EDTA 10% volume 50 μl.

Keywords: Hematocrit Value, Erythrocyte Morphology