

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 crenation of erythrocytes was on erythrocytes abnormal. The shrinkage could be caused by pre analytic 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 use 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 50 µL were 43% and Cell cotation 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 erythrocytes terhadap decrease hematocrit value on the use of EDTA 10% volume 50 µl.

Keywords: Hematocrit Value, Erythrocyte Morphology