

PENGARUH WAKTU PENYIMPANAN DARAH DOUBLE OXALAT TERHADAP HITUNG JUMLAH ERITROSIT METODE AUTOMATIC

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ABSTRAK

Hitung jumlah eritrosit merupakan bagian dari pemeriksaan hematologi untuk menentukan jumlah eritrosit dalam 1 μL darah. Pemeriksaan darah Double Oxalat sebaiknya segera dilakukan. Lamanya waktu penyimpanan spesimen yang dapat mempengaruhi perubahan morfologi sel eritrosit secara invitro, yaitu pengkerutan sel eritrosit. Tujuan penelitian untuk mengetahui adanya pengaruh waktu penyimpanan darah Double Oxalat pada suhu ruang terhadap hitung jumlah eritrosit metode *automatic*. Jenis penelitian adalah eksperimen dengan desain penelitian *pre and post test* di KPRI “ANUGERAH” dengan jumlah sampel 9. Setiap sampel dilakukan pemeriksaan hitung jumlah eritrosit segera, setelah penyimpanan spesimen 1 jam, 2 jam dan 3 jam. Uji statistik yang digunakan adalah *One way Anova*. Hasil penelitian ini menunjukkan rerata jumlah eritrosit mengalami penurunan pada tiap variasi waktu penyimpanan spesimen. Secara statistik hasil penelitian menunjukkan tidak ada pengaruh yang bermakna terhadap jumlah eritrosit yang dihitung setelah penyimpanan spesimen selama 1 jam, 2 jam dan 3 jam. Hasil analisis data menunjukkan nilai signifikan diatas 0,05 ($p>0,05$). Sehingga dapat disimpulkan bahwa tidak ada pengaruh yang bermakna terhadap hasil hitung jumlah eritrosit metode *automatic* yang dilakukan setelah penyimpanan spesimen selama 1 jam, 2 jam, dan 3 jam di suhu ruang (15-25°C).

Kata Kunci : Double Oxalat, Pengaruh waktu, Hitung jumlah eritrosit, Metode *automatic*

THE EFFECT OF STORAGE TIME OF DOUBLE OXALATE BLOOD TOWARDS THE CALCULATION AMOUNT OF ERYTHROCYTES WITH AUTOMATIC METHOD

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ABSTRACT

The calculation amount of erythrocytes is the part of hematology examination to determine the amount of erythrocytes in 1 μL blood. The examination of Double Oxalate blood should be done immediately. The long duration of specimen storage which can affect of erythrocytes cell morphology changes in invitro, that is shrinkage of erythrocytes cell. The objective of this research is to find out the effect of storage time of Double Oxalate blood in the room temperature towards the calculation amount of erythrocytes with automatic method. The type of this research is an experiment with the research design of pre- and post-test at Inpatient Primary Clinic “ANUGERAH” with 9 samples. Each sample was done by checking the amount of erythrocytes immediately, after the specimen was stored for 1 hour, 2 hours, and 3 hours. The statistical test used in this experiment *One way Anova*. The results of this research showed that the average amount of erythrocytes decreased on each storage time variation of the specimen. Statistically, the results of the research showed that there was no significant effect on the amount of erythrocytes which was calculated after the specimen was stored for 1 hour, 2 hours, and 3 hours. The result of data analysis showed a significant number above 0,05 ($p>0,05$). Thus it can be concluded that there is no significant effect towards the calculation amount of erythrocytes with automatic method which was done after the specimen was stored for 1 hour, 2 hours, and 3 hours in the room temperature (15-25°C).

Key words: Double Oxalate, The Effect of Storage Time, The Amount of Erythrocytes, Automatic Method