

ABSTRAK

PENGARUH VARIASI WAKTU PENUNDAAN PEMERIKSAAN TERHADAP HASIL HEMATOKRIT

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Pemeriksaan hematokrit merupakan salah satu parameter penting dalam menilai keseimbangan sel darah merah dalam tubuh, dan menggambarkan persentase volume eritrosit terhadap volume darah. Penundaan pemeriksaan sampel darah diketahui dapat memengaruhi stabilitas komponen darah akibat terjadinya perubahan volume dan morfologi sel eritrosit, sehingga berpotensi memengaruhi akurasi hasil pemeriksaan. Penelitian ini bertujuan untuk mengetahui pengaruh variasi waktu penundaan pemeriksaan terhadap hasil hematokrit. Jenis penelitian yang digunakan yaitu penelitian eksperimental dengan jumlah sampel sebanyak 10 orang yang memenuhi kriteria inklusi. Hasil pemeriksaan hematokrit yang dilakukan segera memiliki nilai rerata sebesar 42,0%, standar deviasi 3,60, nilai maximum sebesar 47,4%, dan nilai minimum sebesar 36,7%. Hasil pemeriksaan yang ditunda selama 2 jam menunjukkan nilai rerata sebesar 41,8%, standar deviasi 3,61, nilai maximum sebesar 47,3%, dan nilai minimum sebesar 36,5%. Selisih hasil rerata diperoleh sebesar 0,2%. Hasil analisis menggunakan *Paired Sample T-Test* menunjukkan *p-value* sebesar 0,000 ($p < 0,05$), yang menandakan terdapat pengaruh variasi waktu penundaan pemeriksaan terhadap hasil hematokrit. Selisih nilai yang relatif kecil tersebut menunjukkan bahwa perubahan hasil tidak selalu berdampak klinis secara langsung, namun mencerminkan adanya perubahan stabilitas sampel darah akibat waktu penundaan pemeriksaan yang perlu diperhatikan dalam pengendalian mutu pra-analitik.

Kata Kunci: Hematokrit, *Hematology Analyzer*, Penundaan

ABSTRACT

EFFECT OF VARIATION IN EXAMINATION DELAY TIME ON HEMATOCRIT RESULTS

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The hematocrit examination is one of the important parameters in assessing the balance of red blood cells in the body, and describes the percentage of erythrocyte volume to blood volume. Delays in the examination of blood samples are known to affect the stability of blood components due to changes in the volume and morphology of erythrocyte cells, potentially affecting the accuracy of the test results. This study aims to determine the effect of variations in examination delay time on hematocrit results. The type of research used is experimental research with a sample of 10 people who meet the inclusion criteria. The results of the hematocrit examination that were carried out immediately had an average value of 42.0%, a standard deviation of 3.60, a maximum value of 47.4%, and a minimum value of 36.7%. The results of the examination that were postponed for 2 hours showed an average value of 41.8%, a standard deviation of 3.61, a maximum value of 47.3%, and a minimum value of 36.5%. The difference in average yield was obtained by 0.2%. The results of the analysis using the Paired Sample T-Test showed a p-value of 0.000 ($p < 0.05$), which indicates that there is an effect of variations in the time of delay in examination on the results of hematocrit. The relatively small difference in values indicates that changes in results do not necessarily have a direct clinical impact, but reflect changes in blood sample stability due to the delay in examination that needs to be considered in pre-analytical quality control.

Keywords: Delay, Hemathocrit, Hematology Analyzer