

ABSTRAK

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PERBEDAAN HASIL PEMERIKSAAN *Glycated Hemoglobin* (HbA1C) SEGERA DIPERIKSA DENGAN PENUNDAAN PEMERIKSAAN SELAMA 24 JAM PADA SUHU RUANG.

xvii + 42 Halaman + 9 Tabel + 7 Lampiran

Pemeriksaan *glycated hemoglobin* (HbA1c) merupakan parameter penting dalam evaluasi kontrol glukosa jangka panjang pada pasien diabetes melitus. Faktor terkait stabilitas sampel darah sebelum proses analisis dapat berdampak pada keakuratan hasil laboratorium. Penundaan pemeriksaan sering terjadi dalam praktik laboratorium klinik, sehingga penting untuk mengetahui dampaknya terhadap hasil HbA1c. Penelitian ini bermaksud untuk menilai apakah terdapat perbedaan signifikan pada nilai HbA1c pada sampel yang dianalisis segera dan sampel yang pemeriksaannya ditunda selama 24 jam pada suhu ruang. Penelitian ini adalah penelitian eksperimental dengan desain *Post Test Only Control Group*. Pemeriksaan dilakukan menggunakan alat Wondfo FIA meter plus HC-B014 yang memiliki prinsip yaitu imunokromatografi fluoresensi. Hasil statistic menunjukkan $p=0,069$ yang berartikan jika perbedaan tersebut diartikan jika tidak terdapat perbedaan yang signifikan ($p > 0,05$), serta dapat disimpulkan jika penyimpanan selama 24 jam pada suhu ruang tidak memberikan pengaruh terhadap hasil HbA1c. Penundaan pemeriksaan HbA1c hingga 24 jam pada suhu ruang tidak secara signifikan memengaruhi hasil pemeriksaan. Temuan ini memberikan implikasi praktis bagi laboratorium dalam penanganan sampel HbA1c yang tidak dapat langsung dianalisis.

Kata kunci: HbA1c, penundaan pemeriksaan, suhu ruang, stabilitas sampel

Daftar Bacaan: 2 buku (2021-2023)

ABSTRACT

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THE DIFFERENCE IN THE RESULTS OF THE Glycated Hemoglobin (HbA1c) EXAMINATION SHOULD BE CHECKED IMMEDIATELY WITH THE DELAY OF EXAMINATION FOR 24 HOURS AT ROOM TEMPERATURE

xvii + 42 Pages + 9 Tables + 7 Appendices

Glycated hemoglobin (HbA1c) examination is an important parameter in evaluating long-term glucose control in patients with diabetes mellitus. Factors related to the stability of blood samples before the analysis process can impact the accuracy of laboratory results. Delays in examination are common in clinical laboratory practice, so it is important to understand its impact on HbA1c results. This study aims to assess whether there is a significant difference in HbA1c examination results between samples analyzed immediately and samples that were delayed for 24 hours at room temperature. This type of research used an experimental study with a Post Test Only Control Group design. The examination was conducted using the Wondfo FIA meter plus HC-B014 instrument which uses the principle of fluorescence immunochromatography. The results showed a difference in HbA1c examination results between samples examined immediately and those delayed for 24 hours. However, the statistical result was $p = 0.069$, which means that the difference is interpreted as if there is no significant difference ($p > 0.05$), and it can be concluded that storage for 24 hours at room temperature does not have a significant effect on HbA1c results. Delaying HbA1c testing for up to 24 hours at room temperature did not significantly affect test results. This finding has practical implications for laboratories handling HbA1c samples that cannot be analyzed immediately.

Keywords: *HbA1c, delayed testing, room temperature, sample stability*

Reading List: *2 books (2021-2023)*