

POLITEKNIK KESEHATAN TANJUNGPUR
PROGRAM STUDI TEKNOLOGI LABORATORIUM MEDIS
PROGRAM SARJANA TERAPAN

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**Pengaruh Lamanya Pendiaman Darah EDTA Terhadap Kadar
*Glycated Hemoglobin (HbA1c)***

xv + 31 halaman, 7 tabel, 7 gambar, 10 lampiran

ABSTRAK

Hasil pemeriksaan laboratorium menjadi kunci dalam menegakkan diagnosa penyakit seorang pasien. Untuk menghasilkan pemeriksaan laboratorium yang dapat dipercaya dan bermutu, maka setiap tahap pemeriksaan laboratorium harus dikendalikan untuk meminimalisir kesalahan yang terjadi. Proses penundaan pemeriksaan dan penyimpanan sampel darah perlu diperhatikan, karena kesalahan pada faktor pra analitik akan mempengaruhi kondisi sampel. Kesalahan yang terjadi pada tahap pra analitik dapat mencapai 68%. Tujuan penelitian ini untuk mengetahui pengaruh lamanya pendiaman darah EDTA terhadap kadar HbA1c. Jenis penelitian ini eksperimen dengan 6 perlakuan yang menggambarkan pengaruh lamanya pendiaman darah EDTA pada suhu ruang terhadap kadar HbA1c yang didiamkan selama 0 jam, 1 jam, 2 jam, 3 jam, 4 jam dan 5 jam. Penelitian dilakukan di Laboratorium Klinik Pramitra Biolab Indonesia. Didapatkan rata-rata kadar HbA1c dari 6 perlakuan dengan 4 kali pengulangan secara berturut-turut pada perlakuan pendiaman darah 0, 1, 2, 3, 4 dan 5 jam sebesar 5,50%, 5,53%, 5,65%, 5,63%, 5,60% dan 5,58%. Terdapat pengaruh lamanya pendiaman darah EDTA terhadap kadar HbA1c dengan nilai $p\text{-value} = 0,04$ ($p < 0,05$).

Kata kunci : Pendiaman Darah, Waktu Pemeriksaan, HbA1c
Daftar Bacaan : 29 (2002-2020)

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The Effect of EDTA Blood Residual Duration on Levels of
Glycated Hemoglobin (HbA1c)

xv + 31 pages, 7 tables, 7 pictures, 10 attachments

ABSTRACT

The results of laboratory tests are the key in establishing the diagnosis of a patient's disease. To produce reliable and quality laboratory examinations, each stage of laboratory examination must be controlled to minimize errors that occur. The process of delaying the examination and storage of blood samples needs to be considered, because errors in pre-analytical factors will affect the condition of the sample. Errors that occur in the pre-analytic stage can reach 68%. The purpose of this study was to determine the effect of the duration of EDTA blood retention on HbA1c levels. This type of research is an experimental study with 6 treatments that describe the effect of the duration of EDTA blood holding at room temperature on HbA1c levels which were allowed to stand for 0 hours, 1 hour, 2 hours, 3 hours, 4 hours and 5 hours. The research was conducted at the Pramitra Biolab Indonesia Clinical Laboratory. The average HbA1c levels were obtained from 6 treatments with 4 repetitions in a row in the treatment of 0, 1, 2, 3, 4 and 5 hours blood clotting of 5.50%, 5.53%, 5.65%, 5.63%, 5.60% and 5.58%. There is an effect of the duration of EDTA blood holding on HbA1c levels with p-value = 0.04 ($p < 0.05$).

Key words : Blood Indwelling, Examination Time, HbA1c

Reading List : 29 (2002-2020)