

ABSTRAK

Latar Belakang: Tahap pra analitik paling banyak mengalami kesalahan dalam proses pemeriksaan di laboratorium. Salah satu parameter pemeriksaan di laboratorium klinik adalah asam urat. Pada pemeriksaan kimia darah umumnya menggunakan serum sebagai sampel pemeriksaan, sampel serum yang digunakan harus sesuai dengan SOP (*Standard Operational Prosedur*) yang benar. Pada proses pengolahan spesimen terdapat tahap pembuatan serum. Akan tetapi masih ada beberapa laboratorium yang menunda pembuatan serum. Penundaan pembuatan serum dapat menyebabkan hasil pemeriksaan tidak sesuai dengan keadaan sesungguhnya.

Tujuan: Penelitian ini bertujuan untuk mengetahui pengaruh lama penundaan pembuatan serum selama 30 menit, 90 menit dan 120 menit terhadap kadar asam urat Mahasiswa Semester 6 dan 8 Program Studi Sarjana Terapan Jurusan Teknologi Laboratorium Medis Poltekkes Kemenkes Yogyakarta.

Metode Penelitian: Jenis penelitian ini adalah observasional analitik dengan desain penelitian *cross sectional*. Sampel berupa serum yang berasal dari 30 responden. Data hasil pemeriksaan asam urat yang diperoleh, yaitu 90 data kemudian dianalisis deskriptif dan analisis statistik uji *Shaphiro Wilk* dilanjutkan uji *Repeated Measure ANOVA* menggunakan *IBM SPSS Statistics 26*.

Hasil Penelitian: Nilai rata-rata kadar asam urat pada sampel yang ditunda pembuatan serumnya selama 30 menit, 90 menit dan 120 menit adalah 3,1747 mg/dL, 2,2513 mg/dL dan 1,8473 mg/dL. Selisih rata-rata kadar asam urat sebesar 0,8849 mg/dL.

Kesimpulan: Ada pengaruh lama penundaan pembuatan serum terhadap penurunan kadar asam urat.

Kata Kunci: Serum, kadar asam urat, penundaan pembuatan serum

ABSTRACT

Background: The pre-analytical stage has the most errors in the inspection process in the laboratory. One of the examination parameters in the clinical laboratory is uric acid. Blood chemistry examinations generally use serum as an examination sample; the serum sample used must comply with the correct SOP (Standard Operational Procedure). In the specimen processing process, there is a stage for making serum. However, there are still several laboratories that delay making serum. Delays in making serum can cause the examination results to be inconsistent with the actual situation.

Purpose: This study aims to determine the effect of the delay in making serum for 30 minutes, 90 minutes, and 120 minutes on uric acid levels in Semester 6 and 8 students of the Applied Undergraduate Study Program, Department of Medical Laboratory Technology, Poltekkes Kemenkes Yogyakarta.

Research Methods: This type of research is analytic-observational with a cross-sectional research design. Samples in the form of serum were derived from 30 respondents. The data obtained from the uric acid examination, namely 90 data points, were then analyzed descriptively, and the statistical analysis of the Shapiro-Wilk test continued with the repeated measure ANOVA test using IBM SPSS Statistics.26.

Results: The average values of uric acid levels in samples that were delayed for 30 minutes, 90 minutes, and 120 minutes were 3,1747 mg/dL, 2,2513 mg/dL and 1,8473 mg/dL, respectively. The average difference in uric acid levels was 0,8849 mg/dL.

Conclusion: There is a long delay in the production of serum to reduce uric acid levels.

Keywords: serum, uric acid levels, delayed in making serum.