

ABSTRACT

Background : The urine chemistry examination consists of blood tests, bilirubin, urobilinogen, ketone, protein, nitrite, glucose, pH, specific gravity, leukocyte esterase, and ascorbic acid. Glucose tests in urine aim to detect the presence of Glucose in the urine. In the field there are still frequent delays in urine examination. According to the procedure, urine should be checked for a maximum of 1 hour, or no later than 2 hours after urine is urinated. Delays in examinations can affect the results of the examination, including glucose parameters in the urine.

Research Objectives : To determine the effect of delaying examination of glucose levels in urine.

Research Methods : The type of this research is pre-experimental design. This research was conducted on January 7 to March 25, 2019 at the Clinical Laboratory Installation at the Panti Rapih Hospital in Yogyakarta. This research is using 11 remaining samples from outpatients who had known glucose levels in the urine, then examined at a delay of 1 hour, 2 hours, 3 hours, and 4 hours at room temperature (20-25 ° C). Data analysis using the Kruskal-Wallis Test.

Results : Based on the results of statistical tests that have been carried out, it can be seen that there is no effect of delaying the examination of glucose levels in urine that are immediately examined and delayed for 1 hour, 2 hours, 3 hours, 4 hours, at room temperature (20-25 ° C) with a significant level of 0.987 which means ($p > 0.05$).

Conclusion : There is no effect of delaying the examination of glucose levels in urine that are immediately examined and delayed for 1 hour, 2 hours, 3 hours, 4 hours, at room temperature (20-25 ° C).

Keywords : Examination of glucose level in urine, delay.

ABSTRAK

Latar Belakang : Pemeriksaan kimia urine terdiri dari pemeriksaan darah, bilirubin, urobilinogen, keton, protein, nitrit, glukosa, pH, berat jenis, leukosit esterase, dan asam askorbat. Pemeriksaan glukosa dalam urine bertujuan untuk mendeteksi adanya glukosa dalam urine. Di lapangan masih sering terjadi penundaan pemeriksaan urine. Menurut prosedur, urine seharusnya diperiksa paling lama 1 jam, atau selambat-lambatnya 2 jam setelah urine dikemihkan. Penundaan pemeriksaan dapat mempengaruhi hasil pemeriksaan, termasuk parameter glukosa dalam urine.

Tujuan penelitian : Mengetahui adanya pengaruh penundaan pemeriksaan terhadap kadar glukosa dalam urine.

Metode Penelitian : Jenis penelitian ini merupakan jenis penelitian *pre-experimental design*. Penelitian ini telah dilaksanakan pada tanggal 7 Januari-30 Maret 2019 di Instalasi Laboratorium Klinik Rumah Sakit Panti Rapih Yogyakarta. Penelitian ini memakai 11 sampel sisa dari pasien rawat jalan yang sudah diketahui kadar glukosa dalam urine, kemudian dilakukan pemeriksaan pada penundaan 1 jam, 2 jam, 3 jam, dan 4 jam pada suhu ruang (20-25°C). Analisis data menggunakan *Kruskal-Wallis Test*.

Hasil penelitian : Berdasarkan hasil uji statistik yang sudah dilakukan, dapat dilihat bahwa tidak ada pengaruh penundaan pemeriksaan terhadap kadar glukosa dalam urine yang diperiksa secara segera dan ditunda selama 1 jam, 2 jam, 3 jam, 4 jam, pada suhu ruang (20-25°C) dengan nilai taraf signifikan sebesar 0,000 yang berarti ($p > 0.05$).

Kesimpulan : Tidak ada pengaruh penundaan pemeriksaan terhadap kadar glukosa dalam urine yang diperiksa secara segera dan ditunda selama 1 jam, 2 jam, 3 jam, 4 jam, pada suhu ruang (20-25°C).

Kata Kunci : Pemeriksaan kadar glukosa dalam urine, penundaan.