Perbedaan Jumlah Leukosit Urin Berdasarkan Penundaa Waktu Pada Penderita Diabetes Mellitus

Pasemi[1], Herlisa Anggraini[2], Budi Santosa[2]

1. Program Studi D III Analis Kesehatan Fakultas Ilmu Keperawatan dan Kesehatan Universitas Muhammadiyah Semarang.
2. Laboratorium Patologi Klinik Fakultas Ilmu Keperawatan dan Kesehatan Universitas Muhammadiyah Semarang.

ABSTRAK

Penundaan pemeriksaan laboratorium sering terjadi akibat proses pengiriman sampel, banyaknya sampel yang harus diperiksa dan terbatasnya petugas laboratorium sehingga perlu diperhatikan waktu pemeriksaan sampel urin. Urin harus segera diperiksa dari waktu urin dikemihkan. Penundaan pemeriksaan urin akan berpengaruh pada jumlah sel leukosit dalam urin. Penyimpanan urin dalam suhu ruang selama 2 jam dapat melisiskan leukosit karena meningkatnya perkembangbiakan bakteri. Tujuan penelitian ini untuk mengetahui perbedaan jumlah leukosit urin pada penderita diabetes mellitus yang segera diperiksa, ditunda 1 jam dan 2 jam pada suhu ruang dengan metode pemeriksaan secara mikroskopis. Jenis penelitian adalah penelitian analitik. Penelitian dilakukan terhadap 9 sampel urin penderita diabetes mellitus yang memiliki gula darah sewaktu > 200 mg/dl di Puskesmas Dempet, Demak dengan pengambilan sampel secara acak. Sedimen leukosit urin dibaca dibawah mikroskop dengan perbesaran 40x/LPB. Analisis statistik menggunakan uji Kruskal Wallis. Hasil pemeriksaan menunjukkan rata-rata jumlah leukosit urin langsung adalah 7,56, tunda 1 jam adalah 5,78 dan tunda 2 jam adalah 4,33. Hasil uji Kruskal Wallis menunjukkan p < 0,05, sehingga dapat disimpulkan bahwa ada perbedaan signifikan antara jumlah leukosit urin yang langsung diperiksa dengan yang ditunda 1 jam dan 2 jam.

Kata kunci : Penundaan, jumlah leukosit urin, metode mikroskopis

v

The Differences of Urine Leukocyte Counts Based On Time Delays In People With Diabetes Mellitus

Pasemi[1], Herlisa Anggraini[2], Budi Santosa[2]

1. Three years Diploma of Health Analyst Study Program, Nursing and Health Faculty, Muhammadiyah University of Semarang
2. Clinical Pathology Laboratory, Nursing and Health Faculty, Muhammadiyah University of Semarang

ABSTRACT

Delays in laboratory tests often occur due to the process of sending samples, the number of samples that must be examined and the limited number of laboratory staff so it is necessary to pay attention to the examination of urine samples. Urine must be examined immediately from the time the urine is urinated. Delay in the examination of urine will affect the number of leukocytes in the urine. Storage of urine at room temperature for 2 hours can lyse leukocytes due to increased bacterial proliferation. The purpose of this study was to determine differences in the number of urine leukocytes in patients with diabetes mellitus who were immediately examined, delayed 1 hour and 2 hours at room temperature with microscopic examination methods. This type of research is analytical research. The study was conducted on 9 urine samples of patients with diabetes mellitus who had blood sugar> 200 mg / dl at the Dempet Health Center, Demak with random sampling. Urine leukocyte sediment is read under a microscope with a magnification of 40x / LPB. Statistical analysis using the Kruskal Wallis test. The results of the examination showed that the average number of direct urine leukocytes was 7.56, a 1 hour delay was 5.78 and a 2 hour delay was 4.33. The results of the Kruskal Wallis test showed $p < 0.05$, so it can be concluded that there was a significant difference between the number of urine leukocytes which were directly examined with a delay of 1 hour and 2 hours.

Keywords : delays, urine leukocyte count, microscopic method