

Perbedaan Berat Jenis Urin Berdasarkan Penundaan Waktu pada Penderita Diabetes Mellitus

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ABSTRAK

Penundaan pemeriksaan laboratorium sering terjadi akibat proses pengiriman sampel, banyaknya sampel yang harus diperiksa dan terbatasnya petugas laboratorium. Sampel urin yang baik adalah urin segar yang diperiksa dalam rentan waktu kurang dari 1 jam atau selambat – lambatnya dalam waktu 2 jam setelah dikemihkan, apabila mengalami penundaan maka hasil yang diperoleh kurang akurat karena perubahan susunan akibat aktifitas bakteri. Bakteri menggunakan glukosa dalam urin sebagai sumber energi. Setiap kenaikan glukosa diikuti berat jenis urin. Penelitian dilakukan untuk mengetahui perbedaan hasil pemeriksaan berat jenis urin yang segera diperiksa dengan ditunda 1 jam dan 2 jam pada penderita diabetes mellitus. Metode penelitian menggunakan metode analitik. Penelitian dilakukan di puskesmas Dempet, Demak pada bulan Februari 2018. Sampel diambil secara acak sebanyak 9 responden dari penderita diabetes mellitus yang memiliki gula darah sewaktu $> 200 \text{ mg/dl}$. Hasil pemeriksaan menunjukkan rata – rata berat jenis urin segera diperiksa, tunda 1 jam dan tunda 2 jam adalah 1.026. Teknik analisis data menggunakan uji *One Way anova* diperoleh $p = 0,936$ ($p > 0,05$) menunjukkan tidak ada perbedaan berat jenis urin yang segera diperiksa dengan urin yang ditunda selama 1 jam dan 2 jam.

Kata Kunci : Penundaan, Berat Jenis Urin, Diabetes Mellitus

The Differences of Urine Specific Gravity Based On Time Delays In People With Diabetes Mellitus

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ABSTRACT

Delays laboratory examination often occur due to the shipment of samples, the number of samples to be examined and the limited laboratory workers. The good urine sample is fresh urine were examined in a vulnerable time of less than 1 hour or at the latest within 2 hours after it is cleaned, if it delays the results obtained become less accurate because of changes in the composition as a result of bacterial activity. Bacteria use glucose in urine as a source of energy. Every increase in glucose is followed by urine specific gravity. This research was conducted to determine differences in the result of urine specific gravity were checked directly with delayed for 1 hour and 2 hours in people with diabetes mellitus. This research used analytic method. It was conducted at puskesmas Dempet, Demak in February 2018. Samples taken at random as much as 9 urine samples derived from patients with diabetes mellitus which has blood glucose at the time. The test results showed an average of urine specific gravity directly, delayed 1 hour, and delayed 2 hours was 1.026. Data analysis techniques in this research using *One Way Anova* test obtained $p = 0,936$ ($p > 0,05$) showed no differences in the result of urine specific gravity were checked directly with delayed for 1 hour and 2 hours in people with diabetes mellitus.

Keywords: Delays, Urine Specific Gravity, Diabetes Mellitus