

ABSTRAK

Latar Belakang: Urine harus disentrifugasi dengan kecepatan dan waktu yang tepat untuk mendapatkan sedimen yang optimal dengan sedikit kerusakan sebelum dilakukan proses dekantasi dalam pemeriksaan sedimen urine. Beberapa laboratorium klinis di Daerah Istimewa Yogyakarta tidak melakukan tahapan sentrifugasi dan hanya mendiamkan urine beberapa saat sebelum dilakukan pemeriksaan. Urine yang tidak disentrifugasi dapat menyebabkan kesalahan hasil yang dapat merugikan pasien maupun instansi terkait.

Tujuan: Untuk mengetahui perbedaan dan jumlah sedimen sel epitel pada urine berat jenis tinggi yang disentrifugasi dan didiamkan.

Metode Penelitian: Penelitian ini merupakan penelitian *Pre experimental designs* dengan desain penelitian *Static Group Comparison*. Sampel penelitian ini adalah sampel urine sewaktu sisa pemeriksaan dari beberapa laboratorium di Daerah Istimewa Yogyakarta dengan kriteria berat jenis ≥ 1.025 sebanyak 50 sampel. Sampel dibagi menjadi dua kelompok perlakuan, yaitu sampel disentrifugasi 2.000 rpm selama 5 menit dan sampel yang didiamkan selama 30 menit pada suhu kamar. Sampel diperiksa jumlah sedimen sel epitel dibawah mikroskop medan terang dengan penambahan pewarna *Sternheimer-Malbin*. Hasil diklasifikasikan menjadi +1, +2, +3, +4, dan +5 berdasarkan rentang jumlah sedimen dalam 10 lapang pandang besar.

Hasil Penelitian : Dari 50 total sampel, terdapat 40 (80%) sampel urine memiliki perbedaan tingkat kepositifan hasil dan 10 (20%) sampel memiliki persamaan. Analisis statistik menggunakan Uji Beda Non-parametrik *Mann-Whitney U* didapatkan nilai signifikansi 0,000 ($p < 0,05$) yang artinya ada perbedaan jumlah sedimen sel epitel pada urine berat jenis tinggi yang disentrifugasi dan didiamkan.

Kesimpulan : Ada perbedaan jumlah sedimen sel epitel pada urine berat jenis tinggi yang disentrifugasi dan didiamkan.

Kata Kunci : jumlah sedimen sel epitel, sentrifugasi, pendiaman.

ABSTRACT

Background : Urine must be centrifuged at the right speed and time to get optimal sediment with little damage before decantation is carried out in urine sediment examination. However, some clinical laboratories in the Special Region of Yogyakarta did not conduct centrifugation and only left urine briefly in a few moments before the examination. Urine that is not centrifuged is feared to cause errors in the results of sediment examination which could endanger patients and the related institutions.

Objective : To determine the difference and amount of epitel cell sediment in high spesific grafity urine wich is centrifuged and standed.

Research Methods : This is pre-experimental research with Static Group Comparison research design. This research was carried out at the Clinical Chemistry Laboratory of the Health Analyst Department of Poltekkes Kemenkes Yogyakarta, with subjects and objects of random urine specimens of residual examination from several laboratories in the Special Region of Yogyakarta which is having criteria of specific gravity $\geq 1,025$ in 50 samples. The samples were divided into two treatment groups, there is the sample that was centrifuged 2,000 rpm for 5 minutes and the sample that was standed for 30 minutes at room temperature. The results are translated into +1, +2, +3, +4, and +5 and based on the range of sediments in 10 High Power Fields.

Results : From total 50 samples showed 40 (80%) samples had different results of epitel cell sediment examination and 10 (20%) samples had similarities. Statistical analysis of the Non-parametric Mann-Whitney U Difference Test showed a signifikan value of 0.000 ($p < 0.05$) which meant that there was a difference in the amount of epitel cell sediment in high spesific grafity urine wich is centrifuged and standed.

Conclusion: There is a difference in the amount of epitel cell sediment in high spesific grafity urine wich is centrifuged and standed.

Keywords : Amount of leukocyte sediment in urine, centrifugation, stand of.