ABSTRACT

DIFFERENTIATION OF URINALYSIS RESULT BY DIPSTICK METHOD BETWEEN FRESH URINE, URINE STORAGE 4 HOURS AT ROOM TEMPERATURE, AND URINE STORAGE 4 HOURS AT 2^0C-8^0C

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Background: Urine dipstick tests are often performed in routine examinations of clinicians. The results shown are highly dependent on the urine sample of the type, storage time, and storage temperature before the examination. This study aims to determine differentiation of urinalysis result by dipstick test between fresh urine, urine storage 4 hours at room temperature, and urine storage 4 hour at 2^0C-8^0C.

Methods: This research used cross-sectional approach. There were 34 respondents who gave samples of random urine. First, sample was checked as soon as. And then, each sample was divided into two container shelters (A and B). Container A was checked after 4 hours at room temperature, and container B was checked after 4 hours of storage at 2^0C-8^0C.

Result: Friedman test results on pH obtained p value (sig.) = 0.950; specific gravity was obtained p value (sig.) = 0.074; urobilinogen obtained p value (sig.) = 0,368. Cochran test results on ketone obtained Asymp sig. = 0.368; bilirubin obtained Asymp sig. = 0.497; protein obtained Asymp sig. = 0.368, leucocytes obtained Asymp sig. = 0.135. Hypothesis test states there is no difference in each dipstick parameter.

Conclusion: There is no differentiation of urinalysis result by dipstick method between fresh urine, urine storage 4 hours at room temperature, and urine storage 4 hours at 2^0C-8^0C.

Keywords: urinalysis, dipstick test, fresh urine, urine store, urine ketone

ABSTRAK

PERBEDAAN HASIL URINALISIS METODE DIPSTIK PADA URIN SEGAR, URIN SIMPAN 4 JAM SUHU RUANGAN, DAN URIN SIMPAN 4 JAM SUHU 2^0C-8^0C

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Latar belakang : Uji dipstik urin sering dilakukan dalam pemeriksaan rutin pada klinisi. Hasil yang ditunjukkan sangat bergantung pada sampel urin yaitu jenis, waktu penyimpanan, dan suhu penyimpanan sebelum pemeriksaan. Penelitian ini bertujuan untuk mengetahui perbedaan hasil uji dipstik urin pada urin segar, urin simpan 4 jam suhu ruangan, dan urin simpan 4 jam suhu 2^0C-8^0C.

Metode Penelitian : Penelitian ini menggunakan pendekatan *cross-sectional*. Terdapat 34 responden yang memberikan sampel berupa urin sewaktu. Uji dipstik langsung dilakukan pada sampel yang baru dikemihkan, kemudian sampel dibagi kedalam dua wadah penampungan (A dan B). Wadah A diperiksa setelah disimpan 4 jam pada suhu ruangan, dan wadah B diperiksa setelah disimpan 4 jam pada suhu 2^0C-8^0C.

Hasil Penelitian : Hasil penelitian uji Friedman pada pH didapatkan p *value* (sig.) = 0,950; berat jenis didapatkan p *value* (sig.) = 0,074; urobilinogen didapatkan p *value* (sig.) = 0,368. Hasil uji Cochran pada keton didapatkan Asymp sig. = 0,368; bilirubin didapatkan Asymp sig. = 0,497; protein didapatkan Asymp sig. = 0,368, leukosit didapatkan Asymp sig. = 0,135. Uji hipotesis menyatakan tidak terdapat perbedaan pada setiap parameter dipstik.

Kesimpulan : Tidak terdapat perbedaan hasil urinalisis metode dipstik pada urin segar, urin simpan 4 jam suhu ruangan, dan urin simpan 4 jam suhu 2^0C-8^0C.

Kata kunci : urinalisis, uji dipstik, urin segar, urin simpan, keton urin