

ABSTRACT

Background: The preliminary period is part of the accuracy and precision test before the control period is carried out on the internal quality assurance of the laboratory. Preliminary test data retrieval obtained data of at least 20 data in a row or day to day. If it cannot be collected for 20 consecutive days, Westgard recommends taking 2 data in one day.

Research Objectives: This study aims to determine whether there are differences in the results of the glucose test based on the technique of collecting preliminary test data in a day to day and twice a day.

Research Methods: This research is a comparative study. The research sample was a commercial control serum assayed by HumaTrol N. Data were collected for 30 consecutive days (day to day) and 15 days with 2 data collection in one day. The results of the examination were analyzed statistically.

Research Results: The results of this study showed that the mean result of the glucose test day to day is 104.7305 mg/dL with an SD of 5.46 and CV level is 5.22%, while the mean result of glucose test of two data repetitions in one day is 105.05 mg/dL with an SD of 6.75 and CV level is 6.43%. Based on statistical analysis, this study showed that there was no difference in the results of the glucose test based on data collection techniques day to day and two data in one day ($p = 0.695$).

Conclusion: The conclusion in this study is that there is no difference in the results of the glucose test based on the technique of collecting preliminary test data on a basis day to day and twice a day.

Keywords: Control serum, Preliminary period, glucose test

ABSTRAK

Latar Belakang : Periode pendahuluan merupakan bagian dari uji ketelitian dan ketepatan sebelum dilakukan periode kontrol pada pemantapan mutu internal laboratorium. Pengambilan data uji pendahuluan didapatkan data minimal 20 data secara berturut-turut atau *day to day*. Apabila tidak dapat dilakukan pengambilan selama 20 hari berturut-turut, Westgard merekomendasikan dilakukan pengambilan 2 data dalam satu hari.

Tujuan Penelitian : Penelitian ini bertujuan untuk mengetahui ada tidaknya perbedaan hasil pemeriksaan glukosa berdasarkan teknik pengambilan data uji pendahuluan secara *day to day* dan dua data dalam satu hari.

Metode Penelitian : Penelitian ini merupakan penelitian studi perbandingan (*comparative study*). Sampel penelitian berupa serum kontrol komersial *assayed* merk HumaTrol N. Pengambilan data dilakukan selama 30 hari berturut-turut (*day to day*) dan 15 hari dengan pengambilan 2 data dalam satu hari. Hasil pemeriksaan dianalisis secara statistik.

Hasil Penelitian : Hasil penelitian ini menunjukkan rerata hasil pemeriksaan glukosa secara *day to day* adalah 104.7305 mg/dL dengan SD sebesar 5.46 dan CV sebesar 5.22%, sedangkan rerata hasil pemeriksaan glukosa pengulangan dua data dalam satu hari adalah 105.05 mg/dL dengan SD sebesar 6.75 dan CV sebesar 6.43%. Berdasarkan analisis statistik, penelitian ini menunjukkan tidak ada perbedaan hasil pemeriksaan glukosa berdasarkan teknik pengambilan data secara *day to day* dan dua data dalam satu hari ($p=0.695$).

Kesimpulan : Kesimpulan pada penelitian ini adalah tidak ada perbedaan hasil pemeriksaan glukosa berdasarkan teknik pengambilan data uji pendahuluan secara *day to day* dan dua data dalam satu hari

Kata kunci : Serum kontrol, Periode pendahuluan, pemeriksaan glukosa