

PERBEDAAN KADAR GLUKOSA DARAH PUASA 8 JAM DAN 10 JAM PADA PENDERITA DIABETES MELITUS DENGAN METODE ENZIMATIK

ABSTRAK

Latar Belakang : Diabetes Melitus telah menjadi masalah kesehatan utama di dunia dengan angka kejadian dan kematian yang masih sangat tinggi. Pemeriksaan kadar glukosa darah merupakan salah satu pemeriksaan yang paling sering dilakukan di instalasi laboratorium klinik. Pemeriksaan glukosa darah umumnya dilakukan bagi penderita Diabetes Mellitus (DM) untuk menegakkan diagnosis serta memonitor terapi dan timbulnya komplikasi. Oleh karena itu diperlukan ketepatan pemeriksaan baik pre analitik, analitik dan post analitik. Untuk mendapatkan hasil yang optimum diperlukan pre analitik yang tepat. Diantaranya persiapan puasa yang dilakukan oleh penderita. Dikarenakan terjadi perbedaan prosedur lama puasa pada pemeriksaan glukosa maka diperlukan pengetahuan tentang perbedaan kadar glukosa darah puasa 8 jam dan 10 jam.

Tujuan Penelitian : Mengetahui adanya perbedaan kadar glukosa darah puasa 8 jam dan 10 jam pada penderita diabetes mellitus.

Metode Penelitian : penelitian ini adalah eksperimen semu dengan pengumpulan data primer. Penelitian ini dilaksanakan pada bulan Oktober- November 2018. Populasi pada penelitian ini seluruh anggota prolanis di kecamatan Semin yang menderita Diabetes Melitus. Sampel dengan jumlah 20 responden. Analisis data menggunakan *Paired T-Test*.

Hasil Penelitian : Kadar rata-rata glukosa darah puasa 8 jam adalah 230,95 mg/dl dan kadar rata-rata glukosa darah puasa 10 jam adalah 203,55 mg/dl dengan selisih rata-rata 27,4 mg/dl. Hasil penelitian menunjukkan adanya perbedaan kadar glukosa darah puasa 8 jam dan 10 jam pada penderita diabetes mellitus ($p=0,00$).

Kesimpulan : Ada perbedaan bermakna antara kadar glukosa darah puasa 8 jam dan 10 jam pada penderita Diabetes Mellitus.

Kata Kunci : Diabetes Mellitus, kadar glukosa darah

DIFFERENCE OF 8 HOURS OF FASTING BLOOD GLUCOSE AND 10 HOURS IN DIABETES MELITUS PATIENTS WITH ENZIMATIC METHODS

ABSTRACT

Background: Diabetes mellitus has become a major health problem in the world with a very high incidence and mortality rate. Blood glucose level examination is one of the most frequently performed tests in clinical laboratory installations. Blood glucose examination is generally carried out for people with Diabetes Mellitus (DM) to make a diagnosis and monitor therapy and the emergence of complications. Therefore, the accuracy of examinations is required both pre analytical, analytical and post analytic. To get optimum results, the right pre-analytic is needed. Among the fasting preparation carried out by sufferers. Because there is a difference in the length of the fasting procedure on glucose testing, knowledge of the differences in fasting blood glucose levels of 8 hours and 10 hours is needed.

Objective: To determine the difference in fasting blood glucose levels of 8 hours and 10 hours in patients with diabetes mellitus.

Research Methods: this study is a quasi-experimental with primary data collection. This research was conducted in October-November 2018. The population in this study were all prolans members in Semin sub-district who suffered from Diabetes Mellitus. Sample with 20 respondents. Data analysis using Paired T-Test.

Results: The average level of 8-hour fasting blood glucose was 230.95 mg / dl and the average 10-hour fasting blood glucose level was 203.55 mg / dl with an average difference of 27.4 mg / dl. The results showed a difference in fasting blood glucose levels of 8 hours and 10 hours in patients with diabetes mellitus ($p = 0.00$).

Conclusion: There is a significant difference between fasting blood glucose levels of 8 hours and 10 hours in patients with Diabetes Mellitus.

Keywords: Diabetes Mellitus, blood glucose level