

ABSTRACT

Background: Diabetes mellitus type 2 is a chronic metabolic disease characterized by hyperglycemia and is at risk of causing complications, one of which is impaired kidney function. Long-term hyperglycemia can cause damage to small blood vessels in the kidneys which is characterized by increased serum creatinine levels.

Research Objective: To determine the description of creatinine levels in patients with Type 2 Diabetes at the Godean II Health Center, Sleman.

Research Method: The research is descriptive with the research design used in this study is a cross-sectional approach, the researcher will only describe the picture of creatinine levels in patients with type 2 diabetes mellitus with a patient's duration of more than 5 years at the Godean II Health Center. Then the sample was examined with the Biotechnica Instrument BT 35i Automatic Analyzer using the jaffe reaction method.

Research Results: The results of the study obtained, as many as 30 patients (75%) had creatinine levels within normal limits, while 10 patients (25%) showed abnormal creatinine levels, with normal creatinine levels have an average fasting blood sugar level of 162 mg/dl and patients with high creatinine levels have an average fasting blood sugar level of 168 mg/dl.

Conclusion: Type 2 DM patients with a duration of more than 5 years have high creatinine levels of 25%

Keywords: Type 2 diabetes mellitus, Hyperglycaemia, creatinine levels, duration of suffering.

ABSTRAK

Latar belakang : Diabetes melitus tipe 2 merupakan penyakit metabolik kronis yang ditandai dengan hiperglikemia dan berisiko menimbulkan komplikasi, salah satunya gangguan fungsi ginjal. Hiperglikemia yang berlangsung dalam jangka panjang dapat menyebabkan kerusakan pembuluh darah kecil di ginjal yang ditandai dengan peningkatan kadar kreatinin serum.

Tujuan Penelitian : Mengetahui gambaran kadar kreatinin pada penderita Diabetes Tipe 2 di Puskesmas Godean II Sleman.

Metode Penelitian : Penelitian adalah deskriptif dengan desain penelitian yang digunakan dalam penelitian ini adalah pendekatan *cross sectional*, peneliti hanya akan mendeskripsikan gambaran kadar kreatinin pada penderita diabetes melitus tipe 2 dengan lama derita pasien lebih dari 5 tahun di Puskesmas Godean II. Kemudian sampel diperiksa dengan *Biotechnica Instrument BT 35i Automatic Analyzer* menggunakan metode *jaffe reaction*.

Hasil Penelitian : Hasil penelitian yang didapatkan, sebanyak 30 pasien (75%) memiliki kadar kreatinin dalam batas normal, sedangkan 10 pasien (25%) menunjukkan kadar kreatinin yang tinggi, dengan kadar kreatinin normal memiliki rerata kadar glukosa darah puasa sebesar 162 mg/dl dan pasien dengan kadar kreatinin tinggi memiliki rerata kadar glukosa darah puasa sebesar 168 mg/dl.

Kesimpulan : Pasien DM tipe 2 dengan lama derita lebih dari 5 tahun memiliki kadar kreatinin yang tinggi sebesar 25%

Kata kunci: Diabetes melitus tipe 2, Hiperglikemia, kadar kreatinin, lama derita.