

ABSTRACT

Background: Serum creatinine levels are an important parameter for assessing kidney function and are influenced by age, physical activity, and protein intake from both dietary sources and supplements. Individuals who regularly engage in weight training tend to have greater muscle mass and higher protein intake, which may lead to increased serum creatinine levels.

Objective: To describe the serum creatinine levels in individuals who have routinely performed resistance training for at least one year at Tritunggal Gym.

Methods: This study employed a descriptive cross-sectional approach. The sample consisted of 40 respondents selected using purposive sampling. Data were obtained through serum creatinine levels measured using the Jaffe method and a questionnaire.

Results: Descriptive analysis showed that most respondents had normal creatinine levels (77.5%), while elevated creatinine levels were found in 22.5% of respondents. The mean serum creatinine level was 1.02 mg/dL, with a minimum value of 0.72 mg/dL and a maximum value of 1.51 mg/dL. Elevated creatinine levels were more commonly observed among respondents who exercised more than 5 times per week (15%), performed weight training for 45–60 minutes per session (22.5%), had inadequate water intake (22.5%), and consumed protein and creatine supplements, accounting for 12.5% and 20.0% of respondents, respectively.

Conclusion: The results of this study indicate that most respondents had serum creatinine levels within the normal range, however, elevated creatinine levels were still found in some respondents.

Keywords: Serum Creatinine, Resistance Training, Protein Intake

ABSTRAK

Latar Belakang: Kadar kreatinin serum merupakan parameter penting dalam menilai fungsi ginjal yang dipengaruhi oleh usia, aktivitas fisik, serta asupan protein dari makanan maupun suplemen. Individu yang rutin melakukan latihan beban cenderung memiliki massa otot dan konsumsi protein lebih tinggi sehingga berpotensi meningkatkan kadar kreatinin serum dalam tubuh.

Tujuan: Mengetahui gambaran kadar kreatinin serum pada orang yang rutin melakukan latihan beban minimal 1 tahun di tritunggal gym.

Metode: Penelitian ini menggunakan jenis penelitian deskriptif dengan pendekatan *crossectional*. Sampel penelitian berjumlah 40 responden yang dipilih menggunakan teknik purposive sampling. Data diperoleh melalui pemeriksaan kadar kreatinin serum dengan metode *Jaffe* dan kuesioner.

Hasil: Analisis secara deskriptif menunjukkan bahwa sebagian besar responden memiliki kadar kreatinin normal (77,5%) dan kadar kreatinin tinggi sebesar (22,5%). Nilai rata-rata kadar kreatinin serum responden adalah 1,02 mg/dL dengan nilai minimum 0,72 mg/dL dan maksimum 1,51 mg/dL. Kadar kreatinin tinggi lebih banyak ditemukan pada responden dengan frekuensi latihan lebih dari 5 kali per minggu sebanyak (15%) responden, durasi latihan beban 45 – 60 menit setiap sesi sebanyak (22,5%) responden, asupan air putih kurang sebanyak (22,5%) responden, serta responden yang mengonsumsi suplemen protein dan kreatin masing – masing sebanyak (12,5%) responden dan (20,0%) responden.

Kesimpulan: Hasil penelitian menunjukkan bahwa sebagian besar responden memiliki kadar kreatinin serum dalam batas normal, namun masih ditemukan kadar kreatinin tinggi pada sebagian responden penelitian.

Kata Kunci: Kreatinin Serum, Latihan Beban, Konsumsi Protein