Rasio TG/HDL-C (Trigliserida/*High Density Lipoprotein Cholesterol*) pada Lansia Obesitas Abdominal

Sri Miftakhul Risqiana[1], Mohammad Sulchan[1], Fillah Fithra Dieny[1]

ABSTRAK

Latar belakang: Proses penuaan mengakibatkan tingginya distribusi lemak tubuh bagian abdominal yang menyebabkan peningkatan kadar trigliserida dan penurunan kolesterol HDL. Rasio TG/HDL-C merupakan indikator terbaik untuk mendeteksi sindrom metabolik dibandingkan dengan rasio lipid lainnya. Tujuan penelitian untuk mengetahui rasio TG/HDL-C dan hubungan derajat obesitas abdominal dengan rasio TG/HDL-C pada lansia obesitas abdominal.

Metode: Studi observasional desain *cross sectional* pada 46 subjek lansia dengan obesitas abdominal yang dipilih melalui *multistage sampling*. Variabel bebas adalah lingkar pinggang dan variabel terikat adalah rasio TG/HDL-C. Lingkar pinggang sebagai indikator obesitas abdominal diukur dengan ketelitian 0,1 cm. Trigliserida diuji menggunakan metode GPO-PAP dan HDL-C menggunakan metode CHOD-PAP. Hubungan obesitas abdominal dan rasio TG/HDL-C dianalisis dengan uji *rank* Spearman. Analisis multivariat dilakukan dengan uji regresi linier berganda.

Hasil: Rerata lingkar pinggang subjek sebesar 91,1 ± 6,1 cm. Sebanyak 80,4% subjek memiliki rasio TG/HDL-C tinggi. Rerata TG (144,54 ± 63,31), HDL-C (52,59 ± 13,82), dan rasio TG/HDL-C (3,16 ± 2,02). Rerata rasio TG/HDL-C pada perempuan (3,16 ± 2,07) lebih tinggi dibanding laki-laki (3,05 ± 1,76) (p= 0,891). Ada hubungan positif antara derajat obesitas abdominal dengan rasio TG/HDL-C (r= 0,349, p= 0,018).

Simpulan: Lansia obesitas abdominal memiliki rasio TG/HDL-C tinggi. Semakin tinggi derajat obesitas abdominal semakin tinggi rasio TG/HDL-C.

Kata kunci: lansia, lingkar pinggang, obesitas abdominal, rasio TG/HDL-C

[1]Program Studi Gizi, Fakultas Kedokteran, Universitas Diponegoro, Semarang

The Ratio of TG/HDL-C (Triglycerides/High-Density Lipoprotein Cholesterol) in Elderly Abdominal Obesity

Sri Miftakhul Risqiana[2], Mohammad Sulchan[1], Fillah Fithra Dieny[1]

ABSTRACT

Background: Aging leads to a significant component of body fat being placed in the abdomen, which improves triglyceride levels and lowers High - the density of lipoprotein. Compared to other lipid ratios, the TG/HDL-C ratio is a reliable indicator in detecting metabolic syndrome. This research aims to establish the TG/HDL-C ratio and the association between the severity of abdominal obesity and, thus, the TG/HDL-C ratio in elderly abdominal obesity.

Methods: This observational study used a cross-sectional design and included 46 older people with abdominal obesity selected through multiple sampling stages. Waist circumference served as the study's independent variable, and the TG/HDL-C ratio served as the study's dependent variable. The waist circumference was calculated to the closest of 0.1 cm and used as an indicator of abdominal obesity. The GPO-PAP method was employed to determine triglycerides, while the CHOD-PAP method was employed to measure HDL cholesterol. The TG/HDL-C ratio was evaluated with abdominal obesity by Spearman's rank test. Multiple linear regression analyses are used in multivariate analysis.

Results: The subject's mean waist circumference was 91.1 ± 6.1 cm. A high TG/HDL-C ratio was present in 80.4% of the individuals. The average TG was (144.54 ± 63.31), HDL-C was (52.59 ± 13.82), and the ratio TG/HDL-C was (3.16 ± 2.02). Women had a higher average TG/HDL-C ratio (3.16 ± 2.07) than men (3.05 ± 1.76) ($p = 0.891$). The ratio of TG/HDL-C and the severity of abdominal obesity was positively associated ($r= 0.349$, $p= 0.018$).

Conclusion: The TG/HDL-C ratio has risen in elderly abdominal obesity. The TG/HDL-C ratio improves in linear proportion to the level of abdominal fat.

Keywords: elderly, waist circumference, abdominal obesity, TG/HDL-C ratio.

[2]Nutrition Science Department, Medical Faculty of Diponegoro University, Semarang