

INTISARI

KORELASI ANTARA KADAR KOLESTEROL LDL DENGAN KETEBALAN LEMAK EPIKARDIAL

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Latar Belakang: Pada beberapa dekade belakangan ini, terdapat ketertarikan yang meningkat terhadap jaringan lemak epikardial. Jaringan lemak epikardial saat ini dikenal sebagai organ parakrin dan endokrin yang menghasilkan berbagai substansi aktif, yang memiliki peran penting dalam perkembangan obesitas, sindrom metabolik, dan penyakit jantung, terutama penyakit jantung koroner. Pada populasi dengan hiperkolesterolemia familial, peningkatan kadar kolesterol *low density lipoprotein* (LDL) berkaitan dengan peningkatan ketebalan lemak epikardial. Belum ada penelitian tentang ada tidaknya hubungan antara kolesterol LDL dan ketebalan lemak epikardial pada populasi bukan penderita hiperkolesterolemia familial, khususnya di Indonesia.

Tujuan Penelitian: Mengetahui hubungan antara kadar kolesterol LDL dengan ketebalan lemak epikardial pada pasien rawat jalan RSUP dr. Sardjito.

Metode Penelitian: Penelitian ini menggunakan metode observasional potong lintang, berlangsung pada bulan Juli 2021 hingga bulan November 2021 di RSUP Dr. Sardjito Yogyakarta. Subjek penelitian ini adalah individu dewasa yang memenuhi kriteria inklusi maupun eksklusi. Kadar kolesterol LDL sebagai variabel bebas. Ketebalan lemak epikardial sebagai variabel terikat. Pengukuran kadar kolesterol LDL dan ketebalan lemak epikardial dilakukan di Instalasi Laboratorium Patologi Klinik dan Laboratorium Ekokardiografi RSUP dr. Sardjito. Dilakukan analisis univariat untuk melihat korelasi antara kadar kolesterol LDL dengan ketebalan lemak epikardial.

Hasil Penelitian: Sejumlah 71 sampel dianalisis dalam penelitian ini. Didapatkan data kadar kolesterol LDL dan ketebalan lemak epikardial. Berdasarkan uji normalitas, didapatkan distribusi data tidak normal, sehingga dilakukan analisis korelasi dengan metode Spearman. Analisis korelasi Spearman antara kadar kolesterol LDL dan ketebalan lemak epikardial menunjukkan hasil koefisien korelasi sebesar 0,047 dengan *p-value* sebesar 0,699.

Kesimpulan: Kadar kolesterol LDL serum tidak memiliki korelasi bermakna dengan ketebalan lemak epikardial.

Kata kunci: kolesterol LDL, ketebalan lemak epikardial

ABSTRACT

CORRELATION BETWEEN LDL CHOLESTEROL LEVEL WITH EPICARDIAL FAT THICKNESS

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Background: In recent decades, there has been an increasing interest in epicardial adipose tissue. Epicardial fat tissue is currently known as a paracrine and endocrine organ that produces a variety of active substances, which have an important role in the development of obesity, metabolic syndrome, and heart disease, especially coronary heart disease. In populations with familial hypercholesterolemia, increased levels of low-density lipoprotein (LDL) cholesterol are associated with increased thickness of epicardial fat. There has been no research on whether or not there is a relationship between LDL cholesterol and epicardial fat thickness in non-family hypercholesterolemic populations, especially in Indonesia.

Objective: To determine the relationship between LDL cholesterol levels and epicardial fat thickness in outpatients at Dr. Sardjito Hospital Yogyakarta.

Methods: This study used a cross-sectional observational method, taking place from July 2021 to November 2021 at Dr. Sardjito Hospital Yogyakarta. The subjects of this study were adult individuals who met the inclusion and exclusion criteria. Low density lipoprotein cholesterol level as the independent variable. Epicardial fat thickness as dependent variable. Measurements of LDL cholesterol levels and epicardial fat thickness were carried out at the Laboratory of Clinical Pathology and Echocardiography Laboratory, Dr. Sardjito Hospital Yogyakarta. Univariate analysis was performed to see the correlation between LDL cholesterol levels and epicardial fat thickness.

Results: A total of 71 samples were analyzed in this study. Data obtained on LDL cholesterol levels and epicardial fat thickness. Based on the normality test, it was found that the data distribution was not normal, so a correlation analysis was carried out using the Spearman method. Spearman correlation analysis between LDL cholesterol levels and epicardial fat thickness showed a correlation coefficient of 0.047 with a p-value of 0.699.

Conclusion: Serum LDL cholesterol levels did not have a significant correlation with epicardial fat thickness.

Keywords: *low density lipoprotein cholesterol level, epicardial fat thickness*