

Hubungan Kadar Leptin Serum dengan Kompleksitas Lesi Koroner berdasarkan Skor SYNTAX pada Penderita Penyakit Arteri Koroner Stabil

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Abstrak

Leptin memiliki peran penting dalam pembentukan plak aterosklerosis dengan mengaktifkan respons sel imun dan respons inflamasi ataupun peran langsung terhadap dinding pembuluh darah koroner. Penelitian terdahulu mengenai hubungan antara kadar leptin serum dan kompleksitas lesi koroner masih menunjukkan kontroversi. Penelitian ini bertujuan mengetahui hubungan antara kadar leptin serum dan kompleksitas lesi koroner berdasarkan skor SYNTAX pada penderita penyakit arteri koroner stabil. Metode penelitian berupa observasional, deskriptif, dan analisis korelasi dengan rancangan potong lintang. Subjek penelitian sebanyak 44 orang penderita penyakit arteri koroner (PAK) stabil yang memenuhi kriteria inklusi, menjalani pemeriksaan angiografi koroner di Rumah Sakit Dr. Hasan Sadikin Bandung selama bulan Januari-Mei 2014. Pengambilan sampel darah untuk pemeriksaan kadar leptin serum dilakukan sebelum tindakan angiografi. Kompleksitas lesi arteri koroner dinilai menggunakan skor SYNTAX. Hasil penelitian didapatkan subjek penelitian 84% laki-laki dengan usia rata-rata 54,68 ($\pm 10,24$) tahun. Indeks massa tubuh rata-rata 24,71 ($\pm 3,05$) kg/m². Faktor risiko terbanyak adalah dislipidemia (84%), merokok (72%), hipertensi (38,4%), diabetes melitus (22,7%), dan obesitas (4,5%). Median kadar leptin serum 7.242 (780-36.929) pq/mL, nilai rata-rata skor SYNTAX sebesar 19,52 ($\pm 9,93$). Analisis menggunakan uji korelasi *rank*-Spearman tidak didapatkan hubungan ($p=0,61$; $r= 0,078$). Perbedaan hasil penelitian ini dengan penelitian sebelumnya disebabkan oleh perbedaan subjek dan kriteria penilaian kompleksitas lesi arteri koroner. Simpulan, tidak terdapat hubungan antara kadar leptin serum dan kompleksitas lesi koroner berdasarkan skor SYNTAX pada penderita penyakit arteri koroner stabil. [MKB. 2016;48(1):26-31]

Kata kunci: Kompleksitas lesi koroner, leptin serum, penyakit arteri koroner stabil, skor SYNTAX

Correlation between Serum Leptin Levels and Complexity of Coronary Artery Lesion based on SYNTAX Score in Patients with Stable Coronary Artery Disease

Abstract

Leptin has been shown to play a potential role in the atherosclerotic plaque formation by activating immune and inflammatory cells or directly acting on the vessel wall. Earlier reports of the correlation of serum leptin levels with the degree of coronary lesion stated are still controversial. This study determined the correlation between serum leptin levels and complexity of coronary artery lesion in patients with stable coronary artery disease (SCAD). This is an observational cross-sectional study. Data were collected from January to May 2014 in Dr. Hasan Sadikin Central General Hospital Bandung. Blood samples were collected before angiography procedures. The complexity of coronary artery lesion was assessed using SYNTAX score. There were 44 patients who met inclusion criteria, male 84%, median age 54.68 ($+10.24$) years. Mean body mass index 24.71 ($+ 3.05$) kg/m². Dyslipidemia was the most common risk factor (84%), followed by smoking (72%), hypertension (38.4%), diabetes mellitus (22.7%), and obesity (4.5%). Median leptin level was 7,242 (780-36,929) pq/mL. Mean SYNTAX score was 19.52 ($+9.93$). Leptin level had no correlation with the complexity of coronary artery lesion ($p=0.61$, $r=0.078$). The difference between this study from prior studies might be caused by differences in subject selection and criteria used for complexity of coronary artery lesion. In conclusion, there is no correlation between serum leptin levels and complexity of coronary artery lesion in patients with stable coronary artery disease. [MKB. 2016;48(1):26-31]

Key words: Complexity of coronary artery lesion, leptin, stable coronary artery disease, SYNTAX score

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