

Kadar High Sensitivity C – Reactive Protein (hsCRP) Pada Lansia Obes – Abdominal

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ABSTRAK

Latar Belakang: Proses penuaan mempengaruhi komposisi lemak yang sebagian besar terdistribusi pada bagian abdominal. Lemak yang terakumulasi menyebabkan disfungsi jaringan adiposa yang dapat mempengaruhi *high sensitivity C-Reactive Protein* (hsCRP).

Tujuan: Mengetahui kadar hsCRP pada lansia obes abdominal dikorelasikan dengan tingkatan obesitas abdominal, usia, aktivitas fisik, dan asupan zat gizi.

Metode: Desain penelitian cross sectional dengan subjek 43 lansia obesitas abdominal dipilih secara *multistage random sampling*. Tingkatan obesitas abdominal diukur dengan lingkaran pinggang. Pengujian hsCRP dengan metode *Enzyme-linked immunosorbent assay*. Data yang dikumpulkan meliputi asupan zat gizi dengan *Semi Quantitative Food Frequency Questionnaire* dan aktivitas fisik dengan *International Physical Activity Questionnaire Short Form*. Data dianalisis dengan uji *rank Spearman*, *Mann Whitney*, dan regresi linier berganda.

Hasil: Median kadar hsCRP subjek [3 (0,2-13,9)] mg/L. Sebanyak 91,1% subjek memiliki kadar hsCRP sedang hingga tinggi dimana 86,7% subjek berjenis kelamin perempuan. Perbedaan rerata kadar hsCRP perempuan dan laki-laki ($p = 0.004$). Hubungan tingkatan obesitas abdominal dengan kadar hsCRP ($r = 0.328$; $p = 0.028$). Hubungan kadar hsCRP dengan usia ($p = 0.017$), aktivitas fisik ($p = 0.000$), dan asupan serat ($p = 0.036$).

Simpulan: Sebagian besar subjek memiliki kadar hsCRP sedang hingga tinggi dimana pada perempuan lebih tinggi dibandingkan laki – laki. Terdapat hubungan positif bermakna tingkatan obesitas abdominal dengan kadar hsCRP. Terdapat hubungan kadar hsCRP dengan usia, aktivitas fisik, dan asupan serat.

Kata Kunci: hsCRP, lansia, obesitas abdominal

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High Sensitivity C – Reactive Protein (hsCRP) Levels in Obese – Abdominal Elderly

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ABSTRACT

Background: The aging process affects the fat composition, mainly distributed in the abdominal region. Accumulated fat causes adipose tissue dysfunction, affecting high-sensitivity C-Reactive Protein (hsCRP).

Objective: Determine the correlation between hsCRP with abdominal obesity level, age, physical activity, and nutrient intake in the elderly.

Methods: Research design using cross-sectional with 43 subjects elderly with abdominal obese selected by multistage random sampling. The level of abdominal obesity is measured by waist circumference. The level of hsCRP testing using the Enzyme-Linked Immunosorbent Assay method. The data collected included nutrient intake using the Semi-Quantitative Food Frequency Questionnaire and physical activity using the International Physical Activity Questionnaire Short Form. Data were analyzed by Spearman's rank test, Mann-Whitney's, and multiple linear regression.

Results: The median hsCRP level of the subjects was [3 (0.2-13.9)] mg/L. A total of 91.1% of subjects had moderate to high hsCRP levels where 87.6% of subjects were female. The mean difference between female and male hsCRP levels ($p = 0.004$). The relationship between the level of abdominal obesity and hsCRP levels ($r = 0.328$; $p = 0.028$). The relationship of hsCRP levels with age ($p = 0.017$), physical activity ($p = 0.000$), and fiber intake ($p = 0.036$).

Conclusion: Most subjects had moderate to high hsCRP levels where women were higher than men. There is a significant positive relationship between the level of abdominal obesity and hsCRP levels. There is a relationship between hsCRP levels with age, physical activity, and fiber intake.

Key Words: hsCRP, elderly, abdominal obesity

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