

ABSTRAK

Pendahuluan: Sindrom metabolik dikaitkan dengan peningkatan produksi sitokin proinflamasi, antara lain IL-6, TNF- α dan CRP. Sindrom metabolik juga dikaitkan dengan penyakit ginjal kronis, ditunjukkan oleh mikroalbuminuria. Penilaian rasio albumin kreatinin (ACR), sebagai penilaian kejadian albuminuria, memiliki nilai performa yang lebih baik dalam memprediksi prognosis kejadian nefropati.

Tujuan: Mengetahui korelasi antara faktor-faktor inflamasi dengan rasioalbumin-kreatinin pada sindrom metabolik

Metode: Penelitian observasional analitik dengan pendekatan cross-sectional yang dilakukan di RSUP dr. Kariadi Semarang. Sampel penelitian adalah pasien sindrom metabolik berdasarkan kriteria NCEP-ATP III yang memenuhi kriteria inklusi dan tidak memiliki kriteria eksklusi. Variabel bebas penelitian adalah kadar IL-6, TNF- α , dan CRP. Variabel terikat penelitian adalah rasio albumin-kreatinin. Variabel perancu adalah usia, jenis kelamin dan jumlah komponen sindrom metabolik. Data dianalisis menggunakan uji korelasi Spearman, uji beda Kruskal wallis dan uji Fischer exact dengan tingkat signifikansi $p < 0.05$

Hasil: Tidak didapatkan korelasi antara kadar IL-6 ($p=0.478$), kadar TNF- α ($p=0.437$) dan kadar CRP ($p=0.826$) terhadap nilai ACR. Terdapat korelasi antara jumlah komponen sindrom metabolik ($p=0.010$) terhadap nilai ACR dengan tingkat korelasi positif lemah.

Simpulan: Tidak didapatkan korelasi antara faktor-faktor inflamasi terhadap rasio albumin kreatinin pada pasien sindrom metabolik.

Kata kunci: sindrom metabolik, IL-6, TNF- α , CRP, rasio albumin-kreatinin

ABSTRACT

Introduction: *Metabolic syndrome is associated with increased production of proinflammatory cytokines, including IL-6, TNF- α and CRP. The metabolic syndrome is also associated with chronic kidney disease, demonstrated by microalbuminuria. Assessment of the albumin creatinine ratio (ACR), as an assessment of the incidence of albuminuria, has a better performance value in predicting the prognosis of nephropathy.*

Aims: *To determine the correlation between inflammatory factors and the albumin-creatinine ratio in the metabolic syndrome*

Methods: *An analytic observational study with a cross-sectional approach conducted at dr. Kariadi Semarang. The research sample was patients with metabolic syndrome based on NCEP-ATP III criteria who met the inclusion criteria and did not have exclusion criteria. The independent variables of the study were IL-6, TNF- α , and CRP levels. The research dependent variable is the albumin-creatinine ratio. The confounding variables were age, sex and the number of components of the metabolic syndrome. Data were analyzed using Spearman's correlation test, Kruskal wallis' different test and Fischer's exact test with a significance level of $p < 0.05$*

Results: *There is no correlation between IL-6 levels ($p=0.478$), TNF- α levels ($p=0.437$) and CRP levels ($p=0.826$) to ACR values. There is a correlation between the number of components of the metabolic syndrome ($p=0.010$) to the ACR value with a weak positive correlation level.*

Conclusion: *There was no correlations between inflammatory factors to the ratio of albumine creatinine in metabolic syndrome patients*

Keywords: *metabolic syndrome, IL-6, TNF- α , CRP, albumin-creatinine ratio*