



INTISARI

HUBUNGAN ANTARA HS-CRP DENGAN KELELAHAN PADA PASIEN DENGAN LUPUS ERITEMATOSUS SISTEMIK

Muhammad Ardi Wibawa¹, Deddy Nur Wachid Achadiyono², Ayu Paramaiswari²

¹Peserta PPDS, Ilmu Penyakit Dalam FKKMK-UGM /RSUP dr. Sardjito, Yogyakarta, ²Sub Bagian Reumatologi Ilmu Penyakit Dalam FKKMK-UGM /RSUP dr. Sardjito, Yogyakarta

Latar Belakang: Lupus eritematosus sistemik (LES) adalah penyakit autoimun kronis dengan insidensi 5 per 100.000 orang per tahun. Gejala yang paling dominan pasien LES adalah kelelahan. Mekanisme terjadinya kelelahan pada pasien LES belum diketahui secara pasti. Diperkirakan salah satu penyebabnya adalah gangguan pada jalur metabolisme kynurenin. *High sensitivity c-reactive protein* (hs-CRP), salah satu biomarker inflamasi, dikatakan memiliki korelasi positif dengan jalur kynurenin pada stress oksidatif dan inflamasi. Penelitian hubungan antara kadar hs-CRP terhadap gejala kelelahan pada pasien LES belum pernah dilakukan di Indonesia.

Tujuan Penelitian: Penelitian ini dilakukan untuk mengetahui hubungan kadar hs-CRP terhadap gejala kelelahan pada pasien dengan LES.

Metode Penelitian: Penelitian dengan data sekunder yang dilakukan secara deskriptif analitik, dengan desain cross-sectional. Subjek penelitian adalah pasien LES yang menjalani pengobatan di RSUP Dr. Sardjito, Yogyakarta selama periode Juli - Agustus 2018. Dilakukan pengambilan data kadar hs-CRP dan data kelelahan diukur menggunakan skor FSS. Uji statistik menggunakan uji mann whitney dan chi-square.

Hasil Penelitian: Terdapat 63 subjek penelitian dengan 38 pasien (60%) LES dengan kelelahan dan 25 (40%) tanpa kelelahan. Kadar hsCRP pada pasien dengan fatigue lebih besar daripada pada pasien non-fatigue (rerata 8.2 ± 13.6). Didapatkan cut-off hs-CRP sebesar 8.05 dengan sensitivitas 28.9% dan spesifitas 92%. HsCRP dan depresi sedang berpengaruh signifikan terhadap kelelahan ($p < 0.05$). Pasien dengan hsCRP > 8.05 memiliki kecenderungan mengalami kelelahan 10,4 kali ($p = 0.009$) dan 6.7 kali ($p = 0.30$) mengalami depresi sedang.

Kesimpulan: Terdapat hubungan bermakna antara kadar hs-CRP dengan kelelahan pada pasien LES ($p \leq 0.05$).

Kata Kunci: LES; kelelahan; hs-CRP



ABSTRACT

RELATIONSHIP BETWEEN hs-CRP AND FATIGUE IN PATIENTS WITH SYSTEMIC LUPUS ERITEMATOSUS

Muhammad Ardi Wibawa¹, Deddy Nur Wachid Achadiyono², Ayu Paramaiswari²

¹Resident of Internal Medicine, Department of Internal Medicine Faculty of Medicine, Public Health and Nursing Gadjah Mada University Yogyakarta, ²Division of Rheumatology, Department of Internal Medicine, Faculty of Medicine, Public Health and Nursing Gadjah Mada University/Dr.Sardjito Hospital Yogyakarta

Backgrounds: Systemic autoimmune lupus erythematosus (SLE) is a chronic disease with an incidence of 5 per 100,000 people per year. The most dominant symptom in SLE patients is fatigue. The mechanism of fatigue in SLE patients is still not known. It is proposed that one of the causes is a disturbance in kynurenine metabolism. High sensitivity c-reactive protein (hs-CRP), a biomarker of inflammation, is said to have a positive correlation with the kynurenine pathway in oxidative stress and inflammation. Research on the relationship between hs-CRP levels and symptoms of fatigue in SLE patients has never been done in Indonesia.

Objective: This study was conducted to determine the relationship between hs-CRP levels and fatigue symptoms in patients with SLE.

Methods: A descriptive analytic research using secondary data, conducted with a cross-sectional research design. The research subjects were SLE patients undergoing treatment at Dr. RSUP. Sardjito, Yogyakarta during the period of July - August 2018. Data collection on hs-CRP levels was carried out and fatigue data was measured using the FSS score. The statistical tests used are Mann Whitney and chi-square test.

Results: There were 63 study subjects with 38 (60%) SLE with fatigue patients and 25 (40%) without fatigue. The levels of hsCRP in patients with fatigue were higher than in non-fatigue patients (mean 8.2 ± 13.6). The hs-CRP cut-off was obtained at 8.05 with a sensitivity of 28.9% and a specificity of 92%. HsCRP and moderate depression had a significant effect on fatigue ($p < 0.05$). Patients with hsCRP of > 8.05 had a tendency to experience fatigue 10.4 times ($p = 0.009$) higher and 6.7 times ($p = 0.30$) higher to have a moderate depression.

Conclusion: There was a significant relationship between hs-CRP levels and fatigue in SLE patients ($p \leq 0.05$).

Keywords: SLE, fatigue, hs-CRP