

INTISARI

HUBUNGAN KADAR *C-REACTIVE PROTEIN* DENGAN RASIO *ALPHA FETOPROTEIN- L3/ALPHA FETOPROTEIN (AFP-L3%)* PADA PENDERITA KARSINOMA HEPATOSELULER

Umi Wahyuli Sangadah¹, Neneng Ratnasari², Catharina Triwikatmani²

¹Peserta Program Pendidikan Dokter Spesialis Ilmu Penyakit Dalam
FKKMK Universitas Gadjah Mada

²Subdivisi Gastroenterohepatologi Ilmu Penyakit Dalam FKKMK UGM

Latar Belakang. Karsinoma hepatoseluler (KHS) merupakan keganasan hati dengan prognosis yang buruk. Inflamasi memiliki peran utama dalam patogenesis KHS. Rasio alpha fetoprotein-L3/alpha fetoprotein (AFP-L3%) memiliki sensitifitas dan spesifisitas yang tinggi dalam skrining dan diagnosis, juga sebagai faktor prognosis KHS. C-Reaktif Protein (CRP) merupakan marker inflamasi yang juga dapat menjadi prediktor prognosis KHS.

Tujuan Penelitian. Mengetahui hubungan kadar CRP dengan AFP-L3% pada pasien karsinoma hepatoseluler.

Metode. Penelitian menggunakan rancangan *cross sectional* dengan metode *consecutive sampling* dari populasi pasien KHS yang dirawat di RSUP Dr. Sardjito, Yogyakarta. Data dianalisis secara bivariat dengan uji korelasi *Spearman*, dan uji Mann-Whitney untuk data kategorik. Analisis multivariat dengan uji regresi logistik.

Hasil Penelitian. Terdapat 45 subyek yang memenuhi kriteria dengan rerata umur $60,78 \pm 10,1$ tahun, didapatkan nilai AFP-L3% median 0,4% dengan minimum 0,01% dan maksimum 577 %, Kadar CRP median 43 mg/L dengan nilai minimum 4 mg/L dan nilai maksimum 148 mg/L. Analisis korelasi *Spearman* menunjukkan terdapat korelasi positif yang bermakna antara kadar CRP dengan AFP-L3% dengan kekuatan korelasi lemah ($r=0,271$ $p= 0,036$). Variabel lain yang berhubungan secara bermakna dengan kadar CRP adalah skor *Child-Pugh* dan stadium BCLC.

Nilai *cut-off* kadar CRP ditentukan berdasarkan stadium BCLC pada angka 22,5 mg/L. Hasil analisis regresi logistik menunjukkan skor *Child-Pugh* memiliki pengaruh dominan terhadap kadar CRP dengan koefisien determinasi (R^2) 0,193.

Kesimpulan. Terdapat korelasi positif yang bermakna antara kadar CRP dengan AFP-L3% pada pasien karsinoma hepatoseluler dengan kekuatan korelasi lemah ($r=0,271$ $p= 0,036$)

Kata Kunci. Karsinoma hepatoseluler, AFP-L3%, CRP

ABSTRACT

ASSOCIATION BETWEEN C-REACTIVE PROTEIN LEVELS AND ALPHA FETOPROTEIN-L3/ALPHA FETOPROTEIN (AFP-L3%) RATIO IN HEPATOCELLULAR CARCINOMA

Umi Wahyuli Sangadah¹, Neneng Ratnasari², Catharina Triwikatmani²

¹Internal Medicine Resident, FKMKM Gadjah Mada University

²Gastroenterohepatologi Subdivision, Internal Medicine, FKMKM UGM

Background. Hepatocellular carcinoma (HCC) is a liver malignancy with a poor prognosis. Inflammation has a major role in the pathogenesis of HCC. The alpha fetoprotein-L3/alpha fetoprotein ratio (AFP-L3%) has a high sensitivity and specificity in screening and diagnosis, as well as a prognosis factor for HCC. C-Reactive Protein (CRP) is an inflammatory marker that can also be a predictor of HCC prognosis.

Purpose. The aim of this study is to determine the relationship between CRP levels and AFP-L3% in hepatocellular carcinoma patients.

Method. The study used a cross sectional design with consecutive sampling method from the population of HCC patients treated at RSUP Dr. Sardjito, Yogyakarta. Data were analyzed bivariately with the Spearman correlation test, and the Mann-Whitney test for categorical data. Multivariate analysis with logistic regression test.

Result. There were 45 subjects who met the criteria with an average age of 60.78 ± 10.1 years, obtained a median AFP-L3% value of 0.4% with a minimum of 0.01% and a maximum of 577%, a median CRP level of 43 mg/L with a minimum value 4 mg/L and a maximum value of 148 mg/L. Spearman correlation analysis shows that there is a significant positive correlation between CRP levels with AFP-L3% with weak correlation strength ($r = 0.271$ $p = 0.036$). Other variables that were significantly associated with CRP levels were Child-Pugh scores and BCLC stage. The cut-off value of CRP levels was determined based on the BCLC stage at 22.5 mg/L. The results of logistic regression analysis showed the Child-Pugh score had a dominant influence on CRP levels with a coefficient of determination (R^2) of 0.193.

Conclusion. There was a significant positive correlation between CRP levels with AFP-L3% in hepatocellular carcinoma patients with weak correlation strength

Keywords. Hepatocellular carcinoma, AFP-L3%, CRP