

HUBUNGAN RASIO NETROFIL TERHADAP LIMFOSIT DENGAN STADIUM KARSINOMA KOLOREKTAL

INTISARI

Latar Belakang: Respon inflamasi sistemik telah terbukti berperan sebagai faktor promotor metastasis dan progresivitas tumor melalui inhibisi apoptosis, promosi angiogenesis dan kerusakan DNA. Rasio netrofil terhadap limfosit (NLR), sebagai salah satu penanda inflamasi, berhubungan dengan progresivitas dan metastasis berbagai macam keganasan. Hubungan NLR dengan karsinoma kolorektal masih belum jelas.

Tujuan: Untuk menentukan hubungan rasio netrofil terhadap limfosit dengan stadium klinis pasien karsinoma kolorektal.

Metode: Rancang penelitian adalah kasus kontrol. Data sampel penelitian diambil dari rekam medis, yaitu pasien yang telah terdiagnosis karsinoma kolorektal di bagian bedah digestif Rumah Sakit Umum Pusat (RSUP) Dr. Sardjito Yogyakarta, melalui pemeriksaan patologi anatomi, dengan stadium klinis telah ditentukan melalui pemeriksaan CT Scan, rontgen toraks, USG abdomen dan *bone survey*. Pasien karsinoma kolorektal stadium lanjut dikategorikan sebagai kelompok kasus, sedangkan pasien karsinoma kolorektal stadium awal dikategorisasikan sebagai kelompok kontrol. Nilai netrofil dan limfosit diambil dari hasil pemeriksaan darah rutin sebelum dilakukan terapi. Analisis statistik untuk membuktikan hipotesis menggunakan chi square.

Hasil: Sampel penelitian berjumlah 62 pasien karsinoma kolorektal, masing-masing kelompok terdiri atas 31 sampel. Setelah dilakukan uji chi-square test, didapatkan X^2 hitung (5,22) > X^2 tabel (3,84) taraf signifikansi (α) = 0,05 dengan nilai *confidence interval* antara 1,173 sampai dengan 9,393 dapat disimpulkan terdapat hubungan yang signifikan antara NLR dengan stadium karsinoma kolorektal.

Kesimpulan: Terdapat hubungan yang bermakna antara NLR dengan stadium klinis pada karsinoma kolorektal

Kata kunci: Karsinoma kolorektal, rasio netrofil limfosit, stadium

NEUTROFIL LYMPHOCYTE RATIO RELATIONSHIP WITH COLORECTAL CARCINOMA STAGE

ABSTRACT

Background: Systemic inflammatory responses have been shown to play a role in promoting metastasis and tumor progression through inhibition of apoptosis, promotion of angiogenesis and DNA damage. The ratio of neutrophil to lymphocytes (NLR), as one of the inflammatory markers, is associated with the progression and metastasis of various malignancies. The association of NLR with colorectal carcinoma remains unclear.

Aim: This study aims to determine the association of NLR with colorectal carcinoma stage.

Metode: Research design is a control case. The data of the research sample were taken from the medical record, that is the patient who had been diagnosed with colorectal carcinoma in the digestive surgery of Central General Hospital (RSUP) Dr. Sardjito Yogyakarta, through the examination of anatomic pathology, with clinical stage has been determined through CT Scan examination, chest X-ray, abdominal ultrasound and bone survey. Patients with advanced colorectal carcinoma are categorized as case groups, whereas early colorectal carcinoma patients are categorized as controls. Neutrophil and lymphocyte values were taken from routine blood tests before therapy. Statistical analysis to prove hypothesis using chi square.

Results: The sample of the study was 62 colorectal carcinoma patients, each group consisted of 31 samples. After chi-square test, X^2 count (5,22) > X^2 tabel (3,84) significance level (α) = 0,05 with confidence interval value between 1,173 to 9,393 can be concluded that there is a significant correlation between NLR with colorectal carcinoma stages.

Conclusion: There was a significant relationship between NLR and clinical stage in colorectal carcinoma.

Keywords: Colorectal carcinoma, lymphocyte neutrophil ratio, stage.