

INTISARI

Latar Belakang. Sepsis adalah suatu kondisi disfungsi organ yang mengancam jiwa, yang diakibatkan oleh kegagalan regulasi tubuh dalam merespon terhadap infeksi. Jika kondisi sepsis tidak dikenali dan ditatalaksana sejak dini dapat berujung kepada syok sepsis, disfungsi organ multipel (*Multiple Organ Dysfunction Syndrome*), dan kematian. Pemeriksaan rasio angka neutrofil/limfosit dan trombositopenia adalah metode yang cepat dan sederhana untuk mengevaluasi stress peradangan dan memprediksi mortalitas pasien sepsis di ICU.

Tujuan. Mengetahui hubungan antara kombinasi rasio angka neutrofil/limfosit dan trombositopenia terhadap mortalitas pasien sepsis di ICU RSUP dr. Sardjito

Metode. Penelitian ini dilakukan dengan desain observasional cohort retrospektif dengan pengambilan data dimulai dari bulan Juli 2021 sampai dengan bulan Juni 2022. Dilakukan pencatatan rasio angka neutrofil/limfosit serta trombosit pada awal admisi di ICU, selain itu dilakukan pencatatan terhadap karakteristik umum, komorbid, derajat keparahan, skor SOFA, dan procalsitonin, pada 188 sampel.

Hasil. Kombinasi NLR tinggi ($>15,98$) dan trombositopenia ($<100.000 \mu\text{L}$) ditemukan pada 31 sampel. Kombinasi ini lebih banyak ditemukan pada sampel dengan luaran meninggal dunia, yaitu 26 dari 31 sampel. Namun secara statistik tidak signifikan dengan hasil nilai $p = 0,079$, RR 1,23, CI 95% 1,02-1,48

Kesimpulan. Kombinasi angka rasio neutrofil/limfosit dan trombositopenia tidak berhubungan signifikan terhadap mortalitas pasien sepsis di ICU RSUP dr. Sardjito

Kata kunci : Sepsis, NLR, Trombositopenia, Mortalitas

ABSTRACT

Background. *Sepsis is a life-threatening organ dysfunction caused by a dysregulated host response to infection. If the sepsis condition is not recognized and treated early, it can lead to sepsis shock, multiple organ dysfunction (Multiple Organ Dysfunction Syndrome), and death. Examination of the neutrophil lymphocyte ratio and thrombocytopenia is a quick and simple method to evaluate inflammatory stress and predict mortality in ICU sepsis patients.*

Objective. *To determine the correlation between combination of the neutrophil lymphocytes ratio and thrombocytopenia to the mortality of sepsis patients in the ICU dr. Sardjito hospital*

Method. *This study conducts with a retrospective cohort observational design with data collection starting from July 2021 to June 2022. Sampling was carried out by recording of the ratio of neutrophils/lymphocytes and platelets at the beginning of admission in the ICU. In addition general characteristics, comorbidities, severity, SOFA scores, and procalsitonin, was recorded too in 188 samples.*

Results. *The combination of high NLR (>15.98) and thrombocytopenia ($<100,000 \mu\text{L}$) was found in 31 samples. This combination was more commonly found in samples with deceased outputs, which was 26 of 31 samples (83.9%). But statistically is not significant, with the result of the $p\text{-value} = 0.079$, RR 1.23, CI 95% 1.02-1.48*

Conclusion. *Neutrophil/lymphocyte ratios combined with thrombocytopenia was not significantly related to sepsis patients mortality in the ICU of RSUP dr. Sardjito*

Keywords : *Sepsis, NLR, Thrombocytopenia, Mortality*