

INTISARI

Latar Belakang: Bakteremia atau *bloodstream infections* (BSI) merupakan penyebab tingginya morbiditas dan mortalitas di dunia. Trombosit terlibat dalam merespon infeksi, baik secara langsung maupun melalui perantara molekul dalam plasma. Trombositopenia digunakan sebagai penanda awal untuk terjadinya sepsis, dan terjadi pada hingga 50% pasien sepsis.

Tujuan: Mengkaji hubungan antara trombositopenia terhadap kejadian sepsis pasien bakteremia di ruang intensif RSUP Dr.Sardjito Yogyakarta.

Metode: Penelitian ini menggunakan desain penelitian *cross-sectional*. Subjek penelitian adalah pasien dengan bakteremia yang dirawat di ruang rawat intensif RSUP Dr.Sardjito Yogyakarta usia ≥ 18 tahun. Data penelitian diambil dari rekam medis elektronik. Subjek dikelompokkan menjadi trombositopenia dan non-trombositopenia. Prediksi risiko sepsis dinyatakan dalam Rasio Prevalensi (RP). Nilai $p < 0,05$ dianggap bermakna secara statistik.

Hasil: Jumlah subjek dalam penelitian ini adalah 71 yang terdiri dari 16 subjek dengan trombositopenia dan 55 subjek non-trombositopenia. Prevalensi sepsis pada kelompok trombositopenia, dan non-trombositopenia secara berturut-turut sebesar 62,5% dan 49,09%. Rasio prevalensi kejadian sepsis pada pasien dengan trombositopenia adalah 1,27 (95% IK 0,80-2,03), maka hasil ini tidak menunjukkan hubungan yang signifikan secara statistik.

Simpulan: Trombositopenia pada pasien bakteremia dengan jumlah trombosit $< 150 \times 10^3/\mu\text{L}$ tidak memiliki risiko yang lebih besar terhadap kejadian sepsis.

Kata kunci: kultur darah, bakteremia, jumlah trombosit, trombositopenia, sepsis

ABSTRACT

Background: Bacteremia or bloodstream infections (BSI) are major causes of morbidity and mortality world wide. Platelets have the ability to respond infection, either directly or through molecular involvement in plasma. Thrombocytopenia have been used as an early marker for the onset of sepsis and occurs in up to 50% in sepsis patients.

Objective: To evaluate the relationship between thrombocytopenia and the incidence of sepsis in patients with bacteremia in the intensive care unit at Dr.Sardjito General Hospital Yogyakarta.

Method: This was a cross-sectional study. The subjects were patients with bacteremia who were treated in the intensive care unit aged ≥ 18 years, whose complete blood count with thrombocytopenia from January 2022 to December 2022. Data were extracted from electronic medical records. Subjects were grouped into thrombocytopenia and non-thrombocytopenia. Prediction of sepsis incidence were analyzed in Prevalence Ratio (PR). A p value < 0.05 was considered statistically significant.

Result: The number of subjects in this study was 71 consist of 16 subjects with thrombocytopenia and 55 non-thrombocytopenia subjects. The prevalence of sepsis in thrombocytopenia and non-thrombocytopenia groups was 62.5% and 49.09%, respectively. The prevalence ratio of sepsis incidence in patients with thrombocytopenia was 1.27 (95%CI 0.80-2.03), therefore this result did not show a statistically significant relationship.

Conclusion: Thrombocytopenia in bacteremia patients with a platelet count $< 150 \times 10^3/\mu\text{L}$ does not have a higher risk of sepsis.

Keywords: blood culture, bacteremia, platelet count, thrombocytopenia, sepsis