KORELASI LIMFOSITOPENIA SAAT ADMISI DENGAN KEJADIAN *STROKE ASSOCIATED INFECTION* DI RSUP DR. SARDJITO YOGYAKARTA

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ABSTRAK

Latar belakang: Komplikasi infeksi sering terjadi pada pasien stroke yang dikenal sebagai *stroke associated infection* (SAI). Salah satu faktor yang dapat berkontribusi terhadap SAI adalah kejadian *stroke associated immunodepression syndrome* yang ditandai dengan adanya limfositopenia. Studi ini bertujuan untuk mengkorelasi kejadian limfositopenia saat admisi dengan kejadian *stroke associated infection* di RSUP Dr. Sardjito Yogyakarta.
Metode: Penelitian observasional analitik dengan rancangan kohort prospektif dilakukan dengan menggunakan data *stroke registry* sejak Januari 2020 hingga Maret 2023. Terdapat 373 sampel yang terdiri dari 256 pasien stroke iskemik dan 117 pasien stroke hemoragik. Data kadar limfosit diukur saat admisi dan dinilai kejadian SAI berupa terjadinya infeksi saluran kemih (ISK), pneumonia dan sepsis hingga onset stroke hari ke-7. Titik potong limfositopenia dianalisis dengan mencari nilai area di bawah kurva dengan hasil di bawah 1405 mm^3.
Hasil: Bentuk SAI yang paling banyak muncul adalah ISK dan pneumonia. Kejadian limfositopenia (72%:36%) dan SAI (63%:38%) lebih banyak pada kelompok hemoragik dibandingkan iskemik. Hasil uji bivariat menunjukkan bahwa limfositopenia, usia, jenis kelamin, kadar albumin, disfagia, grade BMI, tingkat kesadaran, dislipidemia dan skor NIHSS berkorelasi dengan kejadian SAI. Uji multivariat menggunakan regresi logistik menunjukkan limfositopenia (p 0.001; OR 14.969), jenis kelamin laki-laki (p 0.021; OR 1.9) dan disfagia (p 0.001; OR 2.48) berkorelasi dengan kejadian SAI.
Kesimpulan: Hasil studi ini menunjukkan bahwa limfositopenia berkorelasi positif secara dependen dengan kejadian SAI bersama dengan variabel lain seperti disfagia dan jenis kelamin laki-laki.
Kata Kunci: *stroke associated infection*, limfositopenia, stroke, infeksi

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CORRELATION OF LYMPHOCYTOPENIA AT ADMISSION WITH STROKE ASSOCIATED INFECTION IN DR. SARDJITO YOGYAKARTA

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ABSTRACT

Objective: Infectious complications often occur in stroke patients known as stroke associated infection (SAI). One factor that can contribute to SAI is the incidence of stroke associated immunodepression syndrome characterized by the presence of lymphocytopenia.
Methods: This study aims to correlate the incidence of lymphocytopenia at admission with the incidence of stroke associated infection in Dr. Sardjito Hospital. Analytical observational study with prospective cohort design was conducted using stroke registry data from January 2020 to March 2023. There were 373 samples consisting of 256 ischemic stroke patients and 117 hemorrhagic stroke patients. Data on lymphocyte levels were measured at admission and assessed the incidence of SAI in the form of urinary tract infection (UTI), pneumonia and sepsis until the onset of stroke on day seven. The cut-off point of lymphocytopenia is analyzed by finding the value of the area under the curve with a result below 1405 mm^3.
Results: The most prevalent forms of SAI were UTIs and pneumonia. The incidence of lymphocytopenia (72%:36%) and SAI (63%:38%) was more in the hemorrhagic than ischemic group. Bivariate analysis showed that lymphocytopenia, age, sex, albumin levels, dysphagia, body mass index, level of consciousness, dyslipidemia and NIHSS scores correlated with the incidence of SAI. Multivariate test using logistic regression showed lymphocytopenia (p 0.001; OR 14.969), male sex (p 0.021; or 1.9) and dysphagia (p 0.001; or 2.48) correlated with the incidence of SAI.
Conclusions: The results of this study suggest that lymphocytopenia has positive correlation with the incidence of SAI along with other variables such as dysphagia and male sex.
Keywords: *stroke associated infection*, lymphocytopenia, stroke, infection

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