

INTISARI

Latar belakang: Sepsis neonatal merupakan penyebab utama mortalitas dan morbiditas neonatus di seluruh dunia terutama di negara berkembang. Indonesia adalah negara dengan kematian neonatus tertinggi peringkat ke-7 pada tahun 2019. Tingginya angka kematian neonatus menjadi salah hambatan utama dalam mencapai *global sustainable development goals*.

Tujuan: Penelitian ini bertujuan untuk membuktikan bahwa sepsis neonatal berhubungan dengan temuan radiologis pada babygram, antara lain gambaran dilatasi usus, hepatomegali, infiltrat paru, dan penebalan cutis-subcutis.

Metode penelitian: Penelitian ini merupakan penelitian analitik observasional dengan rancangan *cross sectional*. Subjek penelitian ini adalah neonatus yang dirawat di *neonatal intensive care unit (NICU)* RSUP Dr. Sardjito Yogyakarta pada kurun waktu September 2023 hingga Maret 2024 serta memenuhi kriteria inklusi dan eksklusi. Subjek yang terkumpul dikelompokkan menjadi 2, yaitu kelompok sepsis dan kelompok non sepsis. Dilakukan analisis apakah terdapat gambaran dilatasi usus, hepatomegali, infiltrat paru, serta penebalan cutis-subcutis pada babygram subjek pada kelompok sepsis dan non sepsis. Dilakukan uji *chi square* dan *Fisher exact* untuk menilai hubungan antara sepsis neonatal dengan gambaran radiologis pada babygram.

Hasil penelitian: Terkumpul sebanyak 80 subjek penelitian, masing-masing 40 subjek untuk kelompok sepsis dan non sepsis. Hasil uji *chi square* dan *Fisher exact* menunjukkan nilai *p* yang signifikan secara statistik pada variabel dilatasi usus, hepatomegali, dan penebalan cutis-subcutis dengan nilai *p* secara berurutan 0,0000000298, 0,000003, dan 0,012. Infiltrat paru terdapat pada seluruh subjek penelitian, baik pada kelompok sepsis maupun non sepsis.

Kesimpulan: Sepsis neonatal berhubungan dengan gambaran radiologis pada babygram berupa dilatasi usus, hepatomegali, dan penebalan cutis-subcutis. Gambaran infiltrat paru tidak berhubungan dengan sepsis neonatal.

Kata kunci: Sepsis neonatal, babygram, dilatasi usus, hepatomegali, penebalan cutis-subcutis.

ABSTRACT

Background: Neonatal sepsis is a major cause of neonatal mortality and morbidity globally, especially in developing countries. Indonesia is the country with the 7th highest neonatal mortality rate in 2019. The high neonatal mortality rate is one of the main obstacles to achieving global sustainable development goals.

Objective: This study aims to prove that neonatal sepsis is associated with radiological findings in babygram, including bowel dilatation, hepatomegaly, lung infiltrates, and thickening of the cutis-subcutis.

Methods: This research is an observational analytical study with a cross-sectional design. The subjects of this study were neonates treated in the neonatal intensive care unit (NICU) at RSUP Dr. Sardjito Yogyakarta from September 2023 to March 2024 and met the inclusion and exclusion criteria. The collected subjects were grouped into 2: the sepsis and non-septic groups. An analysis was carried out to see whether there was bowel dilatation, hepatomegaly, lung infiltrates, and thickening of the cutis-subcutis on the babygram of subjects in the sepsis and non-septic groups. Chi-square and Fisher's exact tests were carried out to assess the relationship between neonatal sepsis and radiological images in babygram.

Results: There were 80 research subjects collected, 40 subjects each for the sepsis and non-septic groups. The chi-square and Fisher exact tests showed statistically significant *p* values for bowel dilatation, hepatomegaly, and thickening of the cutis-subcutis with *p* values respectively 0.0000000298, 0.000003, and 0.012. Lung infiltrates were present in all research subjects, both in the sepsis and non-septic groups.

Conclusion: Neonatal sepsis is associated with radiological features in the babygram in the form of bowel dilatation, hepatomegaly, and thickening of the cutis-subcutis. The appearance of lung infiltrates is not related to neonatal sepsis.

Keywords: Neonatal sepsis, babygram, bowel dilatation, hepatomegaly, thickening of the cutis-subcutis.