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INTISARI

Sepsis neonatorum merupakan masalah kesehatan global dan berkontribusi signifikan terhadap morbiditas dan kematian. Kadar IL-6 neonatus dengan faktor risiko memiliki sensitivitas dan spesifisitas yang tinggi dalam memprediksi sepsis. Tujuan penelitian ini untuk menentukan perbedaan risiko terjadinya sepsis neonatorum awitan dini antara kelompok neonatus dengan kadar IL-6 darah tali plasenta diatas 16,4 pg/ml dengan kelompok neonatus dengan kadar IL-6 darah tali plasenta dibawah 16,4 pg/ml.

Penelitian kohort prospektif di RSUP Dr. Sardjito antara bulan Desember 2020 sampai Februari 2021. Darah tali plasenta diambil setelah plasenta keluar untuk diukur kadar IL-6. Kejadian sepsis neonatorum dimonitor sampai usia 72 jam. Data dianalisis untuk mencari *relative risk* sepsis neonatorum

Empat puluh neonatus lahir dari ibu dengan faktor risiko dilibatkan dalam penelitian ini. Kejadian sepsis neonatorum lebih tinggi pada kelompok neonatus dengan kadar IL-6 yang tinggi (55,5%) dibanding kelompok neonatus dengan kadar IL-6 normal (13,6%), nilai $p=0,016$ dengan RR 5,54 (IK 95% 1,68-18,25). Risiko kejadian sepsis neonatorum awitan dini meningkat pada neonatus yang memiliki kadar IL-6 darah tali plasenta diatas 16,4 pg/ml.

Kata Kunci : sepsis neonatorum, IL-6, klinis sepsis

**UMBILICAL CORD BLOOD INTERLEUKIN-6 LEVEL AS A
PREDICTOR OF EARLY ONSET NEONATAL SEPSIS**
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ABSTRACT

Neonatal sepsis is a global health problem and has significant contribution in neonatal morbidity and mortality. The clinical manifestation was difficult to differentiate between neonate suffering sepsis and neonate not suffering sepsis. Interleukin-6 concentration from neonate which has risk factor yield high sensitivity and specificity for predicting neonatal sepsis. This study has objective to determines relative risk early onset neonatal sepsis between group of neonates with level of IL-6 more than 16,4 pg/ml and group of neonates with level of IL-6 below 16,4 pg/ml.

This cohort prospective study was conducted in Sardjito Hospital, Yogyakarta between December 2020 until February 2021. IL-6 level measured after placenta expelled. Clinical sepsis monitored until 72 hours. Data was analyzed to define relative risk with 95% confidence interval.

Forty newborn born from mother with risk factor were enrolled in this study. Thirteen subjects (32.5%) were had clinical sepsis. Newborn with high IL-6 level experienced neonatal sepsis (55,5%) more than those with normal IL-6 level (13,6%) $p=0,016$. The relative risk is 5,54 (CI 1,68-18,25). There was increasing early onset neonatal sepsis risk in neonate with level of IL-6 more than 16,4 pg/ml.

Keyword : neonatal sepsis, IL-6, clinical sepsis