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**ASSOCIATED FACTORS WITH DEVELOPMENT OF
NECROTIZING ENTEROCOLITIS IN PATIENTS WITH
RESPIRATORY DISTRESS SYNDROME IN BUNDA
WOMAN AND CHILDREN HOSPITAL JAKARTA**

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Necrotizing Enterocolitis (NEC) is one long term effect found in children with Respiratory Distress Syndrome (RDS), associated with high morbidity and mortality. Main risk factors including prematurity, microbial colonization, hemodynamic instability, use of mechanical ventilation and the presence of congenital heart disease. However, study about NEC in patients with RDS is still lacking.

Material:

The study was conducted using medical records from Neonatal Intensive Care Unit (NICU) Bunda Woman and Children Hospital in 2018. From 65 patients, 59 patients were eligible to the criteria and were evaluated with SPSS ver.25. Demographic data and risk factors included were maternal pre-eclampsia, antenatal steroid, birth weight, severity of asphyxia, type of respiratory support, duration of respiratory support, sepsis, and presence of significant Patent Ductus Arteriosus (PDA).

Results:


Nineteen patients (32.2%) of RDS patients had NEC. On multivariate analysis found that factors associated with development of NEC in RDS patients were sepsis (OR=4.9, p value=0.042), birth weight (OR=3.3, p value=0.011), and duration of mechanical ventilation (OR=6.7, p value= 0.009). Severity of asphyxia (p value=0.025) and use of invasive mechanical ventilation (p value=0.036) were cofounding factors while pre-eclampsia (p value=0.247), antenatal steroid (p value=1.00), and presence of significant PDA (p value=1.00) did not significantly associate with NEC in RDS patients.

Conclusion:

Factors including birth weight, duration of mechanical ventilation use, and the presence of sepsis found to be associated in development of NEC in RDS patients. Further research with larger groups is necessary to explore about NEC in RDS patients.

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