ABSTRACT

POLA KUMAN DAN UJI SENSITIVITAS ANTIBIOTIK PADA BAKTEREMIA NEONATUS PREMATUR DI UNIT PERAWATAN NEONATUS RSUD. Dr. SOETOMO TAHUN 2015

Neonatal infection is the highest contributor to neonatal death and The most important neonate factor causing to infection is prematurity or LBW. Antimicrobial therapy should be chosen based on maternal history, bacterial profile, and antimicrobial susceptibility pattern in each neonatal intensive care unit. The objective of this study was to determine bacterial profile and antimicrobial susceptibility pattern in neonatal intensive care unit of Dr. Soetomo Hospital, Surabaya as a reference for the selection of empiric antibiotics.

Descriptive observational study was carried out on preterm neonate who are diagnosed with neonatal bacteremia and have positive blood culture in the period January 1, 2015 to December 31, 2015. The data were obtained from culture records.

In result there were 119 cases of bacteremia in preterm neonate with positive culture. bacteremia was dominant in low-birth-weight (LBW) preterm neonate (67,2%). Gram-negative bacteria were the leading cause of bacteremia in preterm neonate in this study. Isolated bacterial pathogens were predominantly *Klebsiella pneumoniae*. Most of the gram-negative bacteria still have high susceptibility to Meropenem, except *Acinetobacter baumannii* and *Stenotophonas maltophilia* has low susceptibility to Beta-Lactam class and combination Beta-Lactam class-Inhibitor Beta-Lactamase, but it has high susceptibility to Cotrimoxazol. In general, the Gram-negative bacterial have the highest susceptibility to Meropenem and the lowest susceptibility to Penicillins.

In conclusion Isolated bacterial pathogens were predominantly *Klebsiella pneumoniae*. Most of the gram-negative bacteria still have high susceptibility to Meropenem, except *Acinetobacter baumannii* and *Stenotophonas maltophilia*. In general, the Gram-negative bacteria have the highest susceptibility to Meropenem and the lowest susceptibility to Penicillins.

Keywords: Neonates, preterm, bacteremia , antibiotics