

NEONATAL GROUP B STREPTOCOCCUS SEPSIS: A MULTICENTER STUDY IN THAILAND

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Abstract. Invasive group B Streptococcus (GBS) is the most common cause of early-onset neonatal sepsis worldwide, but there are only a few studies of the incidence of neonatal GBS sepsis in Thailand. Routine intrapartum antibiotic prophylaxis is not recommended in Thailand. We aimed to determine the incidence and mortality of GBS sepsis in a multicenter study in Thailand in order to inform GBS prevention and control strategies. We retrospectively reviewed the medical records of neonates to identify those with GBS sepsis at 9 multi-level neonatal care units in Thailand. GBS sepsis was classified by a history of having a blood or cerebrospinal fluid (CSF) culture positive for GBS. The incidence of GBS sepsis (either blood or CSF culture positive for GBS) was 0.12/1,000 live births (33/278,291); of whom 29 (88%) had a positive blood culture for GBS, 2 (6%) had a positive CSF culture for GBS and 2 (6%) had positive blood and CSF cultures for GBS. Twenty-six neonates had early-onset (≤ 6 days after birth) sepsis and 7 neonates had late-onset (≥ 7 days after birth) sepsis. The medians [interquartile ranges (IQR)] for gestational age and birthweight were 38 (5) weeks and 2,760 (1,080) grams. Seven neonates (21%) died. In conclusion, the incidence of neonatal GBS sepsis in our multicenter study from Thailand was lower than in some other regions in the world but the mortality rate was high. Further studies are needed to determine if screening for GBS among pregnant woman and the use of intrapartum antibiotic prophylaxis are warranted in Thailand due to the high mortality rate.

Keywords: newborn, neonatal intensive care, sepsis, *Streptococcus agalactiae*, Group B Streptococcus

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