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GROUP B STREPTOCOCCUS IN PREGNANCY, EPIDEMIOLOGICAL PECULIARITIES OF EARLY AND LATE ONSET STREPTOCOCCAL INFECTIONS IN NEWBORNS

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Abstract

Introduction*: Group B streptococci, also known as Streptococcus agalactiae, commonly inhabit the female genital tract without causing symptoms. However, during labor, it can transmit to the newborn, causing neonatal sepsis and meningitis. Group B Streptococcus is a leading cause of early-onset neonatal sepsis, contributing significantly to perinatal morbidity and mortality globally.*

Material and methods*: This study aims to investigate the role of Group B Streptococcus in neonatal diseases and assess prevention approaches on a global scale while considering the local situation in Armenia. The research entails a comprehensive review of existing literature, focusing on Group B Streptococcus colonization, perinatal transmission, prevention strategies, and associated neonatal outcomes. Data from various studies and epidemiological reports are analyzed to derive insights.*

Results*: Intrapartum antibiotic prophylaxis has been a crucial approach in preventing early-onset Group B Streptococcus disease. However, the targeting strategy, whether based on clinical risk factors or prenatal Group B Streptococcus screening, remains uncertain. Universal bacteriological screening of pregnant women during late pregnancy is widely adopted, yet questions persist regarding its benefits and potential drawbacks. Notably, current preventive strategies do not sufficiently guard against late-onset disease and its related sequelae.*

Conclusion: *To effectively reduce neonatal morbidity and mortality associated with Group B Streptococcus, it is imperative to enhance prevention and treatment strategies. Maternal vaccination against Group B Streptococcus emerges as a promising avenue to alleviate the global burden of this invasive disease, particularly in preventing late-onset disease and its long-term effects. Future efforts should prioritize optimizing vaccination strategies to protect both mothers and their infants, ultimately advancing the goal of reducing neonatal Group B Streptococcus-related diseases and their devastating consequences.*

Keywords: *Group B Streptococcus, perinatal infection, vaginal colonization, rectal colonization, pregnancy, early-onset disease, late-onset disease, antibiotic prophylaxis.*

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