

NCCU CLINICAL GUIDELINES
SECTION: 8

INFECTION, SEPTIC SCREENING AND MANAGEMENT

Section 8: Infection, septic screen and management
Group B Streptococcal disease (GBS)
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GROUP B STREPTOCOCCAL DISEASE

Early-onset Group B streptococcal (GBS) disease is the leading cause of infectious mortality and morbidity in the newborn. Colonisation of the lower genital tract is common, with 10-30% of pregnant women having positive vaginal or rectal cultures. Neonatal early-onset disease is vertically transmitted from the maternal genital tract at the time of delivery. The vertical transmission GBS colonisation rate from a GBS colonised mother is approximately 40 -70%, with 1-2% of colonised neonates developing invasive disease. Invasive GBS usually presents with respiratory symptoms rapidly developing to septicaemia and shock with or without meningitis. Untreated the condition is usually fatal.

Previously, there were 2 strategies to GBS prophylaxis (risk-based and culture-based). While both strategies dramatically reduced the incidence of GBS disease, the culture-based strategy has been found to be 50% more effective at preventing GBS disease. Therefore, routine screening of all women at 35-37 weeks gestation for recto-vaginal GBS colonisation is performed at our hospital. Intrapartum prophylactic antibiotics are administered to all women whose genital tracts are colonised with GBS.

RISK FOR NEONATES FOLLOWING MATERNAL INTRAPARTUM ANTIBIOTIC THERAPY

The management of the neonate either exposed to a colonised genital tract or delivered in the presence of risk factors for GBS disease has been controversial. In the past an empiric balance has been sought between the routine use of antibiotics in the neonate, with inherent over-treatment and induced morbidities, and a wait and see approach whereby an opportunity to manage early invasive disease may be lost. Data from centres using either risk-based or culture-based obstetric determinants of intrapartum antibiotic prophylaxis now provides more evidential basis for neonatal management (See algorithm [GBS Flow chart.pdf](#))

ANTIBIOTIC ADMINISTRATION TO NEONATES OF MOTHERS WITH ANTIBIOTIC ALLERGY

Penicillin G, other semisynthetic Penicillins and Cephalosporins are used frequently in the neonatal period for both therapy and prophylaxis. These antibiotics are exceedingly well tolerated in neonates. Anaphylaxis secondary to their use is rare, even when administered to neonates born of mothers with type I hypersensitivity reactions to penicillin and related agents. Further, there is no evidence that use of Penicillin and related agents in the neonatal period predisposes to subsequent beta-lactam allergy. As neonatal administration of Penicillin and related agents may be lifesaving, their use should not be delayed because of concerns of maternal antibiotic allergy.

[See SECTION B: OBSTETRICS AND MIDWIFERY GUIDELINES: 1.4.1 GROUP B STREPTOCOCCAL DISEASE](#)

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