Mystic Midwifery

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GBS PROPHYLAXIS DECISION GUIDE

WHAT IS GBS?

Group B Streptococcus is a gram-positive bacteria that colonizes the genitourinary and gastrointestinal tract. The bacteria can cause both early (onset within the first six days of life) and late-onset (onset withing 7-89 days of life) infections in neonates (Morgan et al., 2021);(Hanna & Noor, 2021).

Why does GBS matter in pregnancy?

In the US, GBS is known as the most common infectious cause of morbidity and mortality in neonates (newborns). Early infections in newborns can be prevented by administration of treatment to pregnant people who test positive for GBS.

When are pregnant people screened for GBS?

Testing for GBS is a common practice in prenatal care. Usually, between weeks 35-37 in pregnancy, a vaginal and rectal culture is obtained. Results of the culture may take a few days to post. It is important to note that the most common screenings used in the US can sometimes be inaccurate or lead to "false positives" (Dekker, 2017).

What is the standard treatment for GBS?

The Unted States, in it's management of GBS recommends universal screening for all pregnant people. ACOG, the American College of Obstetricians and Gynecologists now uphold the CDC's previous guideline to provide intrapartum antibiotic prophylaxis to all pregnant people who test positive for GBS unless a prelabor cesarean birth is performed in the setting of in-tact membranes (water-bag) (ACOG, 2020).

Are there alternative treatments to antibiotics for GBS?

Taking Lactobacillus may lessen a pregnant person's chances of becoming colonized with GBS. Furthermore, some midwives use Hibiclens, a topical disinfectant. Hibiclens has been found to offer minimal protection against GBS but may foster greater results in developing countries or as last minute efforts to prevent GBS colonization by vertical transmission (Dekker, 2017).

What are my options if I test positive for GBS?

- Receive IV Antibiotics (Penicillin or Ampicillin) at the Onset of Labor & Every 4 Hours Until Birth
- Opt for a Risk-Based Approach: Receive Antibiotics Based on Other Factors Such as Parental Fever or Ruptured Waters for Greater than 18 Hours
- No Treatment

GBS STATS

GBS Colonization has an Incidence of 10-30% in Pregnancy

Widespread Screening and Antibiotic Prophylaxis has Reduced the Incidence of Early-Onset Neonatal Disease from 1.7 Cases per 1000 Live Births (in the 90s), to 0.22 Cases in 2017 (Hanna & Noor, 2021).

Vertical Transmission from Colonized Parent to their Child Occurs in 41-72% of Cases. Although, 1-12% of Colonized Infants are Born to Non-Colonized Mothers/Parent (Hanna & Noor, 2021).

The majority of infants exposed to GBS during delivery become colonized and do not develop signs or symptoms of infection (Morgan et al., 2021).

Without Preventative Measures, Early-Onset GBS Infection Occurs in 1-2% of Neonates Born to Mothers Colonized with GBS.

The Estimated Death Rate from Early GBS Infection in Newborns is 2-3% for Full-Term Infants: Out of 100 Newborns who have the Infection, 2-3 Will Die.

Colonization and Infection Largely Correlates with Parental Colonization at the Time of Delivery (bacteriuria may demonstrate greater colonization).

Majnun, M. (n.d.) [A laboratory expert takes a covid 19]. *Visme.*

GBS Decision Guide:

Use the template on the following pages to rate the importance of each topic regarding GBS testing and treatment options. Invite your partner, family or those that you trust in decision making to review the decision guide alongside you. If you do not have support or are feeling pressured about decision making, speak to your care provider to make a plan regarding how to address the matter.

Treatment	Benefits	Importance Rating (0-5)	Risks/ Disadvantages	Importance Rating (0-5)
GBS Testing:	Identifies GBS Colonization in Parent		Testing May Be Inaccurate	
	33% of Parents who have a Positive GBS Culture at 35-37 Weeks are Not Colonized at Delivery (Morgan et al., 2021)		10% of People Colonized at Delivery will have a Negative Culture at 35-37 Weeks (Morgan et al., 2021)	
			60% of Cases of Early-Onset GBS Occur in Neonates Born to Parent's with a Negative GBS Culture at 35-37 Weeks (Morgan et al., 2021)	
IV Antibiotics During Labor: (Can be Administered at Home)	Reduces the Risk of Neonatal Morbidity & Mortality		IV Antibiotics Do Not Protect Against Late-Onset GBS (Morgan et al., 2021)	
	Newborn's Risk of Early-Onset GBS Reduced by 83% (Dekker, 2019).		Cochrane Review Concluded that Study-Quality is Limited for the 83% Reduction Statistic (Dekker, 2019).	
	Reduces the Risk of Parental Chorioamniotis which can Result in Parental Sepsis (Morgan et al., 2021).		Babies Receive Antibiotics; Childhood Antibiotic Use Negatively Affects the Gut Microbiome and can be Linked to Asthma, Wheezing, Obesity and Diabetes. Long-Term Effects on Infant Microbiome are Unknown (Garcia, 2021).	

Treatment	Benefits	Importance Rating (0-5)	Risks/ Disadvantages	Importance Rating (0-5)
IV Antibiotics During Labor:	IV's Do Not Inhibit Movement in Labor: Can be set to "Lock"		Some View IV's in Labor as an Inconvenience	
			Severe Allergic Reactions to Antibiotics have been Reported, at an Estimated Rate of 1 in 10,000 (Dekker, 2019).	
			Yeast Infections from Antibiotics can Negatively Affect Parent & Interfere w/Breas/Chestfeeding (Thrush) (Dekker, 2017).	
Risk-Based Approach: (Approach Based on Midwife-Client Prerogative if Client Presents w/ Multiple GBS Symptoms) & Positive GBS Test	Decision can be Made via the Severity of Indicating Factors: Ruptured Water >18 Hours, Parental Fever, Parental Bacteriuria, Preterm Labor, Prior Infant w/GBS		Disadvantages of IV Antibiotics During Labor Still Persist in Risk-Based Approach	
	Advantages for IV Antibiotics in Labor Persist in Risk-Based Approach (Neonatal Mortality & Morbidity)			

GBS Signs & Symptoms:

Early-onset GBS infection typically presents in the first 24-48 hours of life. Sypmtoms include: apnea, respiratory distress, fever and symptoms of sepsis. Sepsis and pneumonia comonly result from early-onset GBS, along with meningitis at a lesser rate.. Parent GBS can have repercussions like: endometriosis, chorioamniotis, postoperative wound infections, pyleonephritis, and other ascending infections (Morgan et al., 2021).

Treatment	Benefits	Importance Rating (0-5)	Risks/ Disadvantages	Importance Rating (0-5)
No Treatment	Less Intervention (IV/Antibiotics)		Without Prophylaxis, Early Onset GBS Infection Occurs in 1-2% of Neonates (Morgan et al., 2021)	
	Lessened or Obsolete Parental-Child Antibiotic Exposure		Early-Onset GBS Infection can Lead to Maternal Infection & Pneumonia, Sepsis and Meningitis in Newborns (Hanna & Noor, 2021)	

DO YOU HAVE ENOUGH INFORMATION TO MAKE AN INFORMED CHOICE? Y. N.

DO YOU HAVE SUPPORT REGARDING YOUR DECISION? Y. N.

IS MORE ASSISTANCE NEEDED TO MAKE A DECISION DUE TO LACK OF SUPPORT? Y. N.

HOW CAN I HELP YOU FURTHER? _____

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