Clarify your decision:

- 1. What decision are you facing: GBS- Group B Strep
- 2. What are the reasons for making this decision?

My lab result come out: positive

- □ I want more information about options
- 3. When do you need to make a choice?

Explore your decision.

What is GBS

A type of bacteria that lives in the intestines.

- Migrates to the vagina and rectum of mother/birthing person
- The major cause of meningitis, pneumonia, and sepsis in newborns

10-30% of pregnant people carry GBS

Newborn Infection with GBS

- Early infection = within 7 days after birth
- Symptoms usually within 12 hours- almost all by 24-48 hours
- Study of 148,000 infants– 94 developed early GBS and had symptoms within 1 hour
- Caused by transfer of GBS from mother to baby, usually after
- water breaks

Being colonized with GBS does not mean that someone will develop a GBS infection. Most people with GBS do not have any GBS infections or symptoms. However, GBS can cause urinary tract infections and GBS infections in the newborn (CDC 2010), and people who have preterm births are 1.7 times more likely to be colonized with GBS during labor than people who do not have preterm births (Valkenburg-van den Berg et al. 2009).

Symptoms of GBS Infection

- Fever
- Difficulty feeding
- Irritability or lethargy
- Difficulty breathing
- Blue-ish color to the skin
- Grunting
- Very high or low heart rate
- Abnormal vitals

How accurate is testing for GBS?

- Of women who screen positive for GBS, 84% are still positive during labor
- Of women who screen negative, 91% are still GBS negative during labor.

Potential harms:

- Although rare, severe allergic reactions have been reported. The risk is estimated to be 1 in 10,000 for a severe reaction, and 1 in 100,000 for a fatal reaction. (Weiss and Adkinson 1988).
- IV antibiotics have been shown to cause a short-term negative effect on the infant's microbiome; however, most infants will experience a recovery of their microbiome, and this recovery is enhanced by breastfeeding.
- There is an increase in the risk of maternal and newborn yeast infections, which can harm the breastfeeding relationship. In one study, 15% of women who received antibiotics in labor had mother-baby yeast infections (maternal nipple and infant mouth infections), compared to 7% of mothers who did not have antibiotics (Dinsmoor et al. 2005).
- Other potential harms have to do with side effects related to the antibiotic that is used Penicillin, ampicillin, cefazolin, clindaymycin, and vancomycin.
- The potential medicalization of labor and birth (RCOG 2003).
- We do not have studies to determine if the infant has any issues as a child with their microbiome from the antibodies treatments.

Penicillin Allergy: CDC guidelines for GBS

- Low risk for anaphylaxis = Cefazolin
- At high risk for anaphylaxis:
- Antimicrobial susceptibility testing
- If sensitive to clindamycin and erythromycin, use clindamycin If sensitive to clindamycin but not erythromycin– additional testing
- needed for "inducible resistance to clindamycin"
- Vancomycin last resort is resistance to all of these

For more information: https://evidencebasedbirth.com/GroupBStrep/

Navigate your options:

	Benefits- Pro	Rate how much it matters 0 -not all 5 -greatly	Risks- Con	Rate how much it matters 0 -not all 5 -greatly
Option #1 Get Treatment	If treated it reduces the spread of the infection to the infant from 1%-2 % to 0.2%. (absolute numbers) Effective treat is 4 hours - 2 hours for a treat before the infant is born. • Ampicillin and penicillin decrease the risk of early GBS infection by 83-91% • Antibiotics cross into the fetal circulation • Universal approach > "guess" approach • Antibiotic resistance has not been a problem with penicillin		The GBS is not accurate. It is should have rapid GBS testing during labor. Affects the infant's microbiome. Read more in the selection: Potential harms. Severe allergic reactions • Increase in the risk of yeast infections; decrease in beneficial bacteria • Side effects of the antibiotic • Potential medicalization of normal labor and birth • PCN allergy limits your options	
Option #2 Don't want to be treated or wasn't able to get treated	For every 1,000 women who are GBS positive and do not receive antibiotics, 500 infants will be colonized.		10-20% out of 500 infants colonized will have early GBS infections and 0.5-1 will die if the infant is born full term. However, infants born earlier than 33 weeks	

		their a risk increase for mortality of 20 -30%.
Option #3 Alternative	 Chlorhexadine (Hibiclens) Reduces colonization by 28% Probiotics Inhibits growth of GBS due to an increase in acidity; decrease in maternal colonization (43% tested negative vs. 14% in placebo group) Garlic does inhibit growth of GBS Colloidal Silver Unknown Diet (yogurt, kefir, etc.) Unknown 	 not effective at reducing infection rates in infants. Unknown, has not been tested in pregnant women. Unknown; has not been tested in pregnant women. Unknown Unknown

Summary

- ★ Screening and treating GBS has led to lower rates of newborn infections than giving antibiotics based on other "risk factors"
- ★ There are pros AND cons to the universal approach
- ★ Two-thirds of remaining infections are now due to inaccurate screening results
- ★ Alternatives do not have supporting evidence- probiotics look promising for prevention

Which option do you prefer?

- Option #1
- Option #2
- Options #3
- □ Not sure

Who is your Support?

Who else is involved?

Which option do they prefer?

Is this person pressuring you?

- 🗌 Yes
- 🗌 No

How can they support you?

How would you like them to support you?

How do you feel the most nourished, cared for, and loved?

What words give your confidence and strength?

What words do you wish not to hear?

What words discouraged you?

When things are not going smoothly, how will you be acting and what would your body language tell us?

What role do you prefer in making the choice?

- □ Share the decision with:
- Decide myself after hearing views of :
- □ Someone else decides:

Identify your decision-making needs.

Do you know the benefits and risks of each option?

- □ Yes
- 🗌 No

Are you clear about which benefits and risks matter most to you?

- □ Yes
- 🗌 No

Do you have enough support and advice to make a choice?

🗌 Yes

🗌 No

Do you feel sure about the best choice for you?

- 🗌 Yes
- 🗌 No

Resources

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- Fouhy, F. et al. (2012). "High-Throughput Sequencing Reveals the Incomplete, Short-Term Recovery of Infant Gut Microbiota following Parenteral Antibiotic Treatment with Ampicillin and Gentamicin." Antimicrob Agents Chemother 56(11): 5811–5820. Click here.
- Turrentine, M.A. et al. (2013). "Duration of Intrapartum Antibiotics for Group B Streptococcus on the Diagnosis of Clinical Neonatal Sepsis." Infect Dis Obstet Gynecol 2013: 525878. Click here.
- Group B Strep Support is a consumer-based charity that advocates for women to have access to GBS screening in the UK.