**Precious Pathways Midwifery**

Robin Allec CPM, LM

 \*Maternity Care \* Breastfeeding Guidance \* Women's Health

Group B Strep (GBS) Information and Informed Choice Form

What is Group B Strep?

Group B Streptococcus (GBS) is a type of bacteria that is found in the lower intestine of 10-35% of all

healthy adults and in the vagina and/or lower intestine of 10-35% of all healthy, adult women. A person

whose body carries Group B Strep bacteria but who does not show signs of infection is said to be

"colonized" with Group B Strep. GBS colonization is not contagious. GBS bacteria are a normal part of

the commonly found bacteria in the human body. Normally, the presence of GBS does not cause

problems. In certain circumstances, however, Group B Strep bacteria can invade the body and cause

serious infection; this is referred to as Group B Strep disease. It can be transmitted to babies if it is

present in the momʼs vagina and rectum at the time of birth. It can also be transmitted through in-tact

membranes (membranes that have no ruptured/water that has not broken) to the baby.

What is are the risks of GBS?

Some babies who are exposed to GBS will get sick, usually within the first few days of birth (early-onset

GBS disease). While this risk is low, it is serious. GBS disease can cause pneumonia or a blood

infection which can lead to death. GBS is the leading cause of life-threatening infection in newborns.

Preterm babies are more likely to die from GBS disease than full-term babies. Rarely GBS will cause

late-onset disease, which occurs after the first week of life. Late-onset GBS disease frequently leads to

meningitis, an infection of the lining surrounding the brain. Babies that survive any form of GBS disease

may become blind, deaf or have learning disabilities. In pregnant women, GBS can cause an infection of

the urinary tract or uterus. These infections are usually treated easily with antibiotics or alternative

therapies.

What are risk factors of GBS disease?

The risk of early-onset GBS disease are highest when:

• A baby is born prematurely (<36 weeks • The mother has had a previous baby with

gestation) GBS disease

• The mother develops a fever during labor • The mother has GBS present in her

• The membranes are ruptured for more during pregnancy

than 18 hours before birth

What are the symptoms of GBS disease?

Any of the following symptoms could indicate GBS disease (and should be evaluated by a medical

professional or pediatric provider immediately).

• Fever of 100° or more • Extreme drowsiness

• Unstable temperature (either low or high) • Irritability

• Breathing difficulties (grunting, flaring, • Heart rate that is outside the normal

retraction) limits (either too low or too high)

• Not eating well

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How common is GBS disease?

On average, about 1,200 babies in the U.S. less than one week old get early-onset group B strep disease each

year), with rates of group B strep disease higher among blacks. Group B strep can also cause some miscarriages,

 stillbirths and preterm deliveries. There are many different factors that lead to stillbirth, pre-term delivery, or

miscarriage. Most of the time, the cause is not known.

In newborns, GBS is the most common cause of sepsis (infection of the blood) meningitis (infection of the fluid

and lining surrounding the brain) and is a frequent cause of newborn pneumonia. GBS disease is more

common than other, better known, newborn problems such as rubella, congenital syphilis, and spina bifida.

Some babies that survive, especially those who develop meningitis, may develop long-term medical problems,

including hearing or vision loss, varying degrees of physical and learning disabilities, and cerebral palsy. For

both early and late-onset group B strep disease, and particularly for babies who had meningitis, there may be long-

term consequences of the group B strep infection such as deafness and developmental disabilities. Care for sick

babies has improved a lot and in the U.S., only 4-6% of babies with group B strep infections die. (CDC website)

How do I know if I am colonized with GBS?

The organism is present in between 5% and 40% of pregnant women. Most often women are asymptomatic.

The presence of GBS can be tested by using a sterile-tip to take a sample of fluids from the entrance of the

vagina and from the area around the anus. The same labs that process blood samples provide the collection

kit and the mother can collect her own sample. These fluids are then grown in a culture at the lab. Results are

usually available within 72 hours. In hospital-based practices this test is routinely performed between 35-37

weeks gestation. In out-of-hospital practices, including Revelation Midwifery, testing is offered with

informed choice.

What are the benefits of being tested?

• If you carry GBS at the time of birth and choose to receive the course of treatment recommended by the

American College of Obstetricians and Gynecologists, the chance that your baby will develop GBS

disease are very small.

• If you test negative and need to transfer to the hospital for birth, you will not need IV antibiotics to

prevent GBS disease (but may receive them for other indications).

• If you test negative, or if you test positive and choose to receive antibiotics, and your baby transfers to

the hospital (for any reason), it is less likely that your baby will be tested for GBS or be provided with

antibiotics for GBS.

What are the risks of being tested?

There are no risks to the test itself. The test is fairly accurate if done within 5 weeks of birth. **However, if you**

**test positive for GBS and need to transfer to a hospital for birth, you will be given antibiotics through an IV.**

How is GBS disease prevented?

The American College of Obstetricians and Gynecologist recommends that all women be tested for the

presence of GBS colonization and all who test positive for GBS, who have previously had a baby with GBS

disease, or who have had a urinary tract infection during their pregnancy due to GBS bacteria be given IV

antibiotics to prevent GBS disease when birthing in a hospital. Antibiotics are believed to quickly remove the

bacteria from the vagina and rectum, and lower the risk of early-onset GBS disease in the newborn. There is

currently no known prevention for late-onset disease.

While infusing women with high doses of IV antibiotics to suppress the GBS before the baby passes through,

has been widely accepted as current protocol, the Cochrane review emphasizes the lack of randomized

controlled trial studies (call the “gold standard” RCTʼs are the most accurate type of studies) and the high risk

of bias in the 3 small studies that exist.

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What are the risks of this particular treatment?

• 10% risk of developing a mild allergic reaction (such as rash)

• 1 in 10, 000 chance of developing a severe allergic reaction--anaphylaxis--to penicillin. Anaphylaxis

requires emergency treatment and can be life-threatening, especially in an out-of-hospital setting.

• May cause resistance in the GBS bacteria making subsequent illness more difficult to treat.

• May produce other side effects such as diarrhea or yeast infections such as thrush, which can disturb

the breastfeeding relationship.

• May allow other bacteria in mother or baby to become resistant (especially E. Coli) and cause other

complications which, in the rare worst case, can be life-threatening.

Is there a law requiring treatment? No. There are currently no laws in California that mandate testing or

treatment for GBS. However, Standard Medical treatment for GBS in a mother or baby is I.V. antibiotics, or

alternatively an injection of antibiotics every 4 hours during labor.

Is there a way to object or refuse treatment?

Yes. Signing an informed refusal form.

Are there alternative treatments available?

Choosing Waterbirth

A single case of early onset newborn Group B Strep was documented among 4,432 hospital births into water in

the absence of GBS prophylaxis, suggesting that low risk women giving birth into water have a 300% lower

rate of newborn GBS disease newborns than dry, full term births delivered by current GBS guidelines.

Possible explanations include:

i) Inoculating the baby with motherʼs intestinal flora at birth protects against GBS infection

ii) Bath water washes off the GBS bacteria acquired during the descent through the vagina

iii) Pool dilutes the GBS among a multitude of other intestinal bacteria which compete with GBS

iv) Early onset GBS disease is prevented by lower level of interventions at water birth which promotes

maternal and fetal immune function

v) Kangaroo care after water birth promotes immune function of mother newborn dyad.

A report of 4,030 births into water reports no deaths from early onset GBS and one GBS infection. When this

study was conducted, the full term dry birth rate for GBS disease was six times higher (1 in 588) than the

waterbirth GBS rate. The current full term dry birth GBS rate is three times higher (1 in 1,450) than the reported

waterbirth rate.

The Cochrane review includes three additional studies tallying another 402 women who birthed their babies

into water for which no cases of newborn GBS infection occurred. The full term waterbirth GBS rate is

therefore, a fraction of the dry birth GBS infection rate even after implementation of the US Center for Disease

Control (CDC) protocols.

Chlorhexidine Washes During Labor

There is significant medical evidence to suggest that vaginal flushing with chlorhexadine (Brand name

Hibiclense, in the US) during labor is as effective as ampicillin in preventing vertical transmission of GBS. In

addition, a study published in the Journal of Fetal Medicine in 2002, documented that the rate of neonatal

E. coli colonization was also reduced by chlorhexidine.

However, chlorhexidine has not been shown to reduce the rate of GBS disease in babies. Thus, it appears that

while chlorhexidine reduces the number of babies who get GBS bacteria, the same number of babies still get

sick from GBS, indicating there are other factors involved in babies acquiring GBS disease.

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GBS seems to originate in the intestines. Alternative health practitioners recommend that healthy bacteria be richly

supplied to crowd out the hazardous bacteria. Acidophilus and other live cultures can be supplied to the body in

yogurt or other cultured milk products. Capsules of mixed live cultures can be taken several times a day. These are

referred to as "probiotics" Garlic in all forms seems to kill strep bacteria and is delicious. It can also be taken larger

doses as a supplement. Grapefruit extract (such as "Nutribiotic") can be used orally as well.

Vaginally, colonies of strep can be reduced by inserting a clove of garlic, rinsing with white vinegar and water,

rinsing with betadine or hibiclense and-water or using an herbal rinse with Echinacea. There is a vaginal suppository

product made with herbs which is specifically targets GBS.

Rinsing the peri-anal area after bowel movements will reduce the amount of bacteria that can

move up into the vagina. Antiseptics such as vinegar, betadine, hibicleanse or herbs can be mixed

with water and kept in a squirt bottle in your bathroom near your toilet. The antiseptics can also

be poured over wipes and used after bowel movements.

 What are other important factors to consider?

• If you carry the GBS bacteria, it is important that you maintain the health of your immune system. A

good diet, particularly one high in fermented foods (such as kefir, yogurt, and sauerkraut) and/or

probiotic supplements, is key. Empirical data supports the use of alternative treatments such as oral

garlic capsules and Echinacea tincture, tea tree oil vaginal suppositories, intravaginal use of garlic oil,

or homeopathics to promote healthy vaginal flora.

• GBS germs can travel or be transported into the womb by digital exams even early in pregnancy. GBS

microorganisms have special attractant molecules that can take hold of genital tract tissues. These

microorganisms also have special molecules that can dissolve through the mucus plug. GBS can then

penetrate membranes and infect the baby or damage the placenta can result in miscarriage or early

pregnancy stillbirth. Later in pregnancy, GBS may be introduced to the baby during routine cervical

checks and other invasive procedures such as intrauterine fetal monitoring, application of cervical

ripening medications, and “membrane stripping” sometimes known as “membrane sweeping.”

 Revelation Midwifery limits the number of internal exams conducted through pregnancy and labor.

Unless there is a medical indication, we do not do routine internal examinations.

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 Informed Choice Form: Group B Strep Testing and Treatment

I have been provided with written information about Group B Strep testing and have had the

opportunity to ask questions. I understand the benefits and risks associated with Group B Strep testing and

the treatment I have chosen. I believe that my midwife has honored my right to make my own informed

decision. I understand that Group B Strep testing is not mandatory and believe in my right to accept or decline

any test or treatment. I also understand that I can withdraw my consent at any time.

I take full responsibility for the health of my child, and I will ensure that if my infant displays any symptoms of

GBS infection, regardless of treatment modality, I will immediately have my infant checked by a healthcare

provider with pediatric expertise. I further understand that if I choose any treatment other than antibiotic therapy

and transport becomes necessary, many hospitals will consider me to be untreated and initiate IV antibiotic

therapy for me during labor and/or for my baby after he/she is born.

My choice for testing is indicated below.

\_\_\_\_­­­­­­­­­­­­­\_\_\_\_\_I choose to be tested for Group B Strep by my midwife at 35-37 weeks of pregnancy.

\_\_\_\_­­­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_­­­­­­­I choose not to be tested for Group B Strep at this time.

\_\_\_\_\_\_\_\_\_Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If my culture is positive for GBS, my decision regarding treatment is:

\_\_\_\_\_I will use nutritional or herbal treatment(s) (oral and/or intravaginal) soon after I am informed of my GBS positive status. Describe treatment: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_I request the use of chlorhexidine as a vaginal wash during labor.

\_\_\_\_\_\_\_\_\_I desire antibiotic treatment during labor only if I present with risk factors.

 \_\_\_\_\_\_I refuse any treatment for GBS at this time.

Mother:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Midwife:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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