Public Education Pamphlet

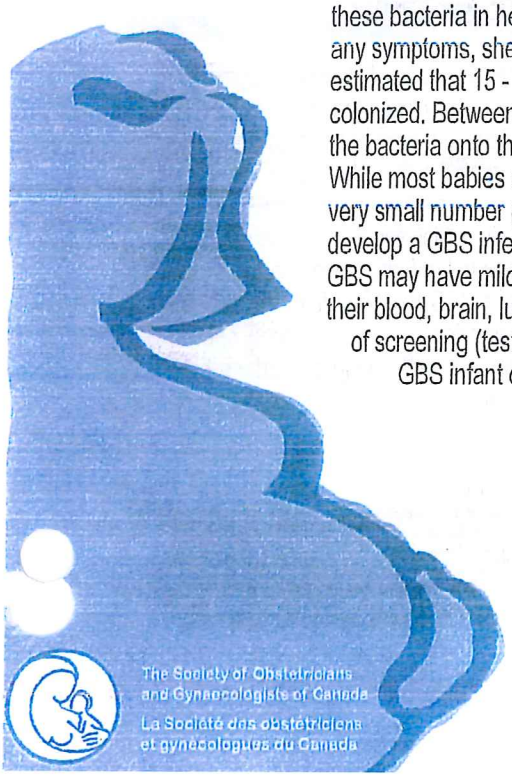
Group B Streptococcus (GBS) Infection in Pregnancy

Introduction

Group B Streptococcus (GBS) are common bacteria which are often found in the vagina, rectum or urinary bladder of women. This is not the same bacteria which causes strep throat. Infections from GBS are usually not serious for a woman and are readily treated with antibiotics. However, when a woman becomes pregnant, the whole outlook changes.There is no sure way to prevent the GBS bacteria from being passed to a newborn at the time of birth and although it is very rare, and despite medical treatment, some babies still die as a result of complications from a GBS infection. Your doctor would like to help prevent this from happening. GBS usually does not cause infections in pregnant women, the concern is for the baby. Read this pamphlet to find out about Group B Streptococcus infections (GBS).

About Group B Streptococcus (GBS)

When GBS bacteria reach a woman's bladder, kidneys or uterus they can cause an infection. Infections can cause inflammation and pain. A woman can have these bacteria in her body and not know it. If a woman has these bacteria in her vagina and rectum without having any symptoms, she is said to be colonized (positive). It is estimated that 15 - 40% of all pregnant women are GBS colonized. Between 40 - 70% of colonized mothers pass the bacteria onto their babies during the birthing process. While most babies are not affected by the bacteria, a very small number (1- 2%) of these babies will go on to develop a GBS infection. Babies who are infected with GBS may have mild to severe problems which may affect their blood, brain, lungs and spinal cord. No one method of screening (testing) and treatment will prevent all GBS infant deaths.



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Screening (Testing) for GBS

Doctors agree that there are two acceptable options for screening, (testing) for GBS. A doctor may choose to routinely culture (test) all the pregnant women under his or her care between the 35th and 37th week of pregnancy, and treat the mothers who are CBS colonized (positive) with antibiotics when labour starts. Or a doctor may choose not to routinely test every woman, but rather to treat only those mothers who are at risk of passing the bacteria to their babies (Table 1) during the birth process. If Cultures were not done around the time of the woman's 35th - 37th week of pregnancy, or if the test results are not available at the time of delivery, it is essential that women at risk are treated with antibiotics.

In addition, particularly if the woman has a history of bladder or kidney infections, a doctor may also test a woman's urine for the bacteria If the bacteria are found in the urine but not found In the vagina or rectum, the woman is still considered colonized (positive) and will still I be treated with antibiotics when she goes into labour.

Table 1: Risk Factors for GBS Infections

Women are at high risk to pass GBS on to their babies if they

- Start labour before they reach 37 weeks gestation (with or without ruptured membranes).
- Reach full term. but their membranes rupture (water breaks) and it seems as through the labour will last more than 18 hours.
- If they have an unexplained, mild fever during labour.
- If they have already had a baby who had a GBS infection.
- If they have (or had) a bladder or kidney infection which was caused by the GBS bacteria.

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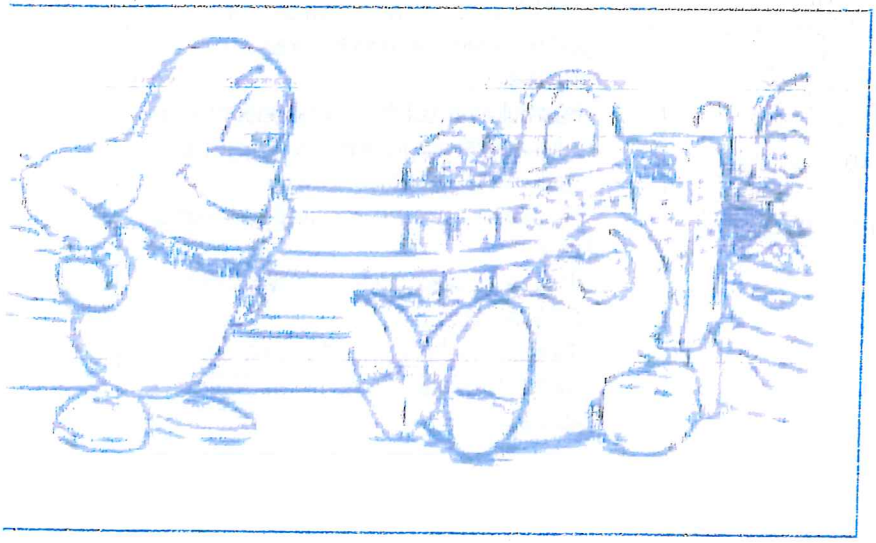
How Is the Test Done?

This simple and painless test is done by inserting a Special Q-tip into a woman's vagina and rectum. The Q-tip is then placed in a special solution to see if the bacteria grow. This is called doing a Culture. If bacteria grow, the woman is said to be colonized (positive) If no bacteria grow, the test is negative.

Treatment for Mother

Expectant mothers who tested positive for CBS bacteria will be treated with antibiotics when they go into labour or if their membranes rupture (water breaks) early. If a mother is not tested but is thought to be at high risk (Table 1) for passing the bacteria on to her baby during the birth process, she will also be treated with antibiotics to kill the bacteria during her labour and birth.Studies show that it is not beneficial to give antibiotics during pregnancy, as in more than 65% of cases, the bacteria have time to re-grow before labour begins.

Be sure to tell your doctor if you think you have had an allergic reaction to antibiotics in the past.



Two Types of GBS Infections in Newborns

There are two types of GBS infections that can happen to newborn babies. The most common type is called early-onset disease. In this case, the babies are almost always infected during their journey down the birth canal because the bacteria were in their mother's vagina. The symptoms of early-onset infections show up before the baby is seven days old. Some babies show signs of this infection as early is six hours after birth. Early-onset disease can cause infections in a baby's lungs, brain, spinal cord or blood. This type of GBS infection can be very serious and frequently hard for a newborn baby to fight off. This is the infection that antibiotic treatment in labour is aimed at preventing.

The second type is called late-onset disease. In this case, the babies don't show signs of a GBS infection until after they are more than seven days old. About half of these babies were also infected during their birth. The other half became infected after the birth by being in contact with their GBS positive mother, or another person who is a carrier of the disease. Late-onset infections can also cause serious problems for the newborn. The most common problem is meningitis - an infection of the membranes which surround the brain and spinal cord. The risk of late-onset disease is not decreased by antibiotic treatment in labour but antibiotics are available for the baby once it is born. Babies with early-onset disease are more likely to die than those babies with late-onset disease.

Treatment for Baby

All newborn infants are watched closely for symptoms of an infection, particularly when the mother was GBS positive at some point in her pregnancy, and no matter whether she was treated with antibiotics or not. While it is true that the chances are small that an expectant mother who was treated with antibiotics during pregnancy will pass the bacteria on to her baby - it can happen. Babies who show signs of a GBS infection after birth will also be treated with antibiotics. If available, a baby specialist (paediatrician) may be asked to help look after a baby with a GBS infection.