A guide to...

Group B streptococcus (GBS) infection in newborn babies

Patient information

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If you need this leaflet in another language, large print, Braille or audio version, please call 01923 217 187 or email pals@whht.nhs.uk
What is Group B Streptococcus (GBS)?
Group B Streptococcus (GBS) is a common bacterium which up to 1 in 5 women in the UK have in their vagina and bowel. Most women will be unaware of its presence as GBS does not usually cause any symptoms. Being a carrier is not harmful to you, and GBS is not sexually transmitted. Infection occurs when group B Streptococcus invades the body tissues.

How is GBS detected?
GBS is sometimes detected during pregnancy when tests for other infections are carried out. Swabs may show that you carry the bacteria and GBS may also be detected in your urine.

Why does it matter?
Many babies come into contact with GBS during labour or during birth. The vast majority of babies will suffer no ill effects. But if these bacteria spread from a mother to her baby during birth, they can cause serious illnesses, including infections of the blood (sepsis), in the lungs (pneumonia) and around the brain (meningitis). One in every 2000 newborn babies in the UK and Ireland is diagnosed with GBS infection. Although the infection can make the baby very unwell, with prompt treatment the majority (7 out of 10 of diagnosed babies) recover fully. However, 2 in 10 babies with GBS infection will recover with some level of disability, and 1 in 10 infected babies will die.

Why are all women not tested for GBS during pregnancy in the UK?
There has been debate for many years as to whether all pregnant women should be offered testing for GBS. The RCOG (2012) and the UK National Screening Committee outline the benefits and disadvantages of both views. At present, there is no clear evidence to show that testing for GBS routinely would do more good than harm:

- Many women carry the bacteria and, in the majority of cases, their babies are born safely and without developing an infection.
- Screening all women late in pregnancy cannot predict which babies will develop GBS infection.
- No screening test is entirely accurate. A negative swab test does not guarantee that you are not a carrier of GBS. In other words, you may be given a negative result when in fact you do carry GBS in your vagina.
- In addition, the majority of babies who are severely affected from GBS infection are born prematurely, before the suggested time for screening.
- Giving all carriers of GBS antibiotics would mean that a very large number of women at very low risk would receive treatment they do not need.
- There is also the general risk from overuse of antibiotics leading to strains of bacteria becoming resistant.

This is why, screening all women in pregnancy to find GBS carriers is not routinely offered in the UK.

Preventing group B strep in new-born babies
If you have risk factors for GBS, you will be recommended to have antibiotics once you are in labour to reduce the risk of your baby developing the infection.
A urine infection caused by GBS should be treated as soon as it is detected. You should also be offered antibiotics during labour even if the infection has cleared up.
If you have previously had a baby who was diagnosed with GBS infection, you will be offered antibiotics in labour.

If you carry GBS, are more than 37 weeks pregnant and your waters break before you go into labour, you will usually be advised to have your labour induced (Started off). This is to reduce the time that your baby is exposed to GBS before birth.

If your doctors or midwives think you may have an infection during your labour but they are not sure of the cause, you should be offered antibiotics that will treat a wide range of infections including GBS.

**If I had GBS in a previous pregnancy should I be given antibiotics during Labour?**

If you were a carrier in a previous pregnancy but your baby was not affected, it is not currently recommended to have antibiotics during labour in this pregnancy. Fewer than 4 in 10 of previous GBS carriers will be carriers in subsequent pregnancies.

**Early-onset group B Strep infection**

Two thirds of babies who develop GBS infection show signs in their first 6 days of life (early onset). Of these almost nine out of every ten show signs within 12 hours of birth.

Some signs and symptoms of early infection in new-born babies are:

- Rapid breathing or difficulty breathing (often the first symptom)
- Making grunting sounds
- Poor feeding and or vomiting
- Being irritable
- A high temperature (fever), or a low temperature
- Difficulty feeding or not wanting to feed
- Being floppy, limp, and hard to wake up.
- Pale blotchy skin

**Late-onset group B Strep infection**

Late onset group B Strep infection occurs after 6 days of life and can occur until a baby is about three months old.

The warning signs of the late onset group B Strep infection are the same but may also include signs associated with meningitis such as:

- Being irritable with high pitched or whimpering cry or moaning
- Floppy, may dislike being handled
- Tensed or bulging fontanelle (soft spot on babies heads)
- Turning away from bright light

Your baby may not display all of the symptoms but it is important to remember if your baby appears unwell call your GP, midwife or Health visitor. If you feel that your baby is too unwell to wait for the arrival of one of the above, call the emergency services without delay. Group B Strep infection is serious, and your baby may become very ill very quickly.
Care after birth
Babies born to mothers with high risk of GBS will be closely monitored for at least 12 hours whether the mother had Intravenous antibiotic in labour or not. Doctors may also take blood samples from your baby to see whether there is any infection. No antibiotic is required if the baby is completely healthy. Antibiotic is only offered to the baby if there is a true risk of infection or signs of infection. Unfortunately, infection occurring after the first week of life is not prevented by giving mothers antibiotics in labour.

Breastfeeding your baby
It is safe to breastfeed your new baby. Breastfeeding has not been shown to increase the risk of GBS infection, and it protects against many other infections.

Handling your (or someone else’s) new-born baby
GBS can be carried on the skin. Good standards of hygiene with frequent and effective hand washing and drying especially before handling your baby or preparing baby’s feeds is very important for preventing all infections. Remember to ask anyone who wishes to handle your baby to wash their hands as well.

Future pregnancies
If your baby has been treated for GBS infection, your healthcare team will advise you that any babies you have in the future will also be at increased risk of early onset neonatal infection. You should tell the maternity care team that a previous baby has had a GBS infection and you will be advised to have antibiotics during labour.

Key points
- Group B streptococcus (GBS) is one of many bacteria that normally lives in our bodies and usually causes no harm. About one-fifth of pregnant women in the UK carry GBS in their vagina.
- GBS carriage is not routinely screened for during pregnancy in the UK.
- The risk of GBS being passed from a mother to a baby is highest during labour or at the time of the birth.
- If GBS is found in your vagina or bowel during your current pregnancy, or if you have previously had a baby with GBS infection, you should be offered antibiotics during your labour.
- The risks are increased for babies born prematurely, if you have a temperature in labour, or when your waters break but labour is delayed by more than 18 hours.
- If your newborn baby develops GBS infection, he or she should be treated promptly with antibiotics.
Sources
This information has been compiled from the RCOG: Group B streptococcus (GBS) infection in newborn babies. Patient Information leaflet: Published in June 2013.
The patient information from BMJ Best Practice: published: Dec 01, 2016

Further information
1. UK National Screening Committee: www.screening.nhs.uk/groupbstreptococcus

Alternatively, your midwife or doctor can discuss any questions you may have.

Maternity Service: Contact Information
- Maternity Day Assessment Unit: 01923217851
- Maternity Triage: 01923217343
- Delivery Suite: 01923217371
- Alexandra Ward Birthing Unit: 01923217364
- Antenatal Ward: 01923217377
- Postnatal Ward: 01923217366