BMJ Best Practice

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Group B strep infection in newborns

Sometimes newborn babies become infected with bacteria (germs) called group B streptococcus. The bacteria are passed on from a mother to her baby during birth. This infection can be serious and needs to be treated quickly. Women are sometimes given antibiotics during labour to prevent this infection.

We've looked at the best and most up-to-date research to produce this information. You can use it to talk to your doctor and decide which treatments are right for you and your baby.

What is it?

Infection with group B streptococcus is quite rare but serious, as it can make a newborn baby very ill.

Group B streptococcus is also called group B strep or GBS. Group B strep can live in your body without causing any problems. 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), in the urinary tract, and around the brain (meningitis).

There are two main types of group B strep infection in babies.

If a baby gets group B strep infection in the first six days of life, it's called **early-onset infection**. Doctors think this happens when babies breathe in fluid that contains group B strep during labour.

If a baby gets group B strep infection from seven days to three months after birth, it's called **late-onset infection**. Doctors aren't certain how this infection happens.

This information is about preventing and treating early-onset group B strep infections.

What are the symptoms?

Most babies who get early-onset group B strep infections become ill within the first few hours of their life.

Some signs and symptoms of early infection in newborn babies are:

- Rapid breathing or difficulty breathing (often the first symptom)
- Grunting
- A high temperature (fever), or a low temperature
- Difficulty feeding or not wanting to feed
- Being floppy, limp, and hard to wake up.

It's very important that you get medical help straight away if you think that your baby is ill. Group B strep infection is serious, and your baby may become very ill very quickly.

Preventing group B strep in newborn babies

To protect newborn babies from group B strep, pregnant women are sometimes given antibiotics during labour. Antibiotics are medicines that kill bacteria. They are given through a drip into a vein (an intravenous infusion, or IV). This helps prevent the group B strep bacteria from passing from the woman to her baby during birth.

Different countries have different guidelines for deciding whether a woman should be treated with antibiotics during labour.

In some countries, such as the US, doctors are advised to test all pregnant women late in their pregnancy to see if they have the group B strep bacteria. This is done by using a swab to take a sample of cells from the woman's vagina and rectum. If the test shows that the woman is carrying group B strep, she'll be given antibiotics during labour.

In other countries, such as the UK, doctors don't routinely test pregnant women for group B strep. Instead, women may be offered antibiotics during labour if they have a raised chance of having group B strep and passing it to their baby. This includes:

- Women who had a baby with group B strep infection before
- Women who had group strep B found in their urine at some time during their pregnancy.

A woman may also be offered antibiotic treatment if:

- She has a fever during labour
- She goes into labour before the end of her 37th week of pregnancy
- Her waters break early.

Babies at most risk of getting a group B strep infection may be given antibiotics when they are born, to try to prevent the infection. But doctors don't always agree about whether all babies who are at risk should be given antibiotic treatment. If your baby is well and has no signs of an infection, they will probably not need treatment.

Treating group B strep in newborn babies

If your baby is unwell, you should get medical help straight away. Babies who have group B strep infection need to be treated quickly with antibiotics.

Antibiotics cure the infection in most babies. They are given to your baby through a drip. They can cause side effects, but these are usually mild, such as diarrhoea or a rash.

What will happen to my baby?

Newborn babies who get group B strep infection need to be treated as soon as possible. Most babies who are treated early make a full recovery. But a few babies die. Also, some babies who get a group B strep infection of the fluid and lining around the brain (meningitis) will have permanent nerve damage. They may get problems with their hearing or sight, or seizures (fits). About half of babies who get meningitis from a group B strep infection go on to have long-term problems.

Where to get more help

There are support groups and other organisations that provide information and assistance for families affected by group B strep. You can ask your doctor for recommendations or look online. One example in the UK is Group B Strep Support (http://www.gbss.org.uk).

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