

Group B streptococcus (GBS) and pregnancy

The group B streptococcus is a bacterium that lives in the colon of most people and is only visible under a microscope. There are different types of streptococcus, of which group B is one of them and is usually referred to as Strep B.

GBS in pregnancy

1 in 5 pregnant women test positive for GBS without them having any symptoms. GBS can be present in the bowels, as well as in the vagina or cervix. Occasionally, they can cause a urinary infection. GBS would then be found in a sample of the urine.

To trace GBS, it is recommended to take a vaginal and rectal swab in the 35-37th week of pregnancy and send it off to the lab. The result is then known after a few days. The test is pain free.

GBS in the newborn

If a pregnant woman is a carrier of GBS, this can be transferred onto the baby in the womb, during the delivery or after the birth. This happens in half of the mothers. In most cases (99%) the baby will not become ill, but Strep B can be positive on a skin sample of the baby. Only one in hundred of these babies will become ill. Because not all mothers are carriers for GBS, only one in thousand of all babies becomes ill because of a GBS infection.

In the case of an infection with GBS, this will usually (9 in 10 cases) happen in the first week after birth (**early onset**). An infection with GBS can appear for up to 3 months after the birth (**late onset**). In this case it's important to know that transmission of GBS can also appear via friends or family, good hand hygiene is a must!

Symptoms of an infection in your baby are: fast and superficial breathing, dusky or pale colour of skin, grunting, not wanting to drink, fever or a very low temperature. Your baby can also lack tone (feel 'limp') and be drowsy. As the progress of the infection can be very fast and serious and is life threatening in rare cases, it is important that these babies can be treated with antibiotics in hospital as soon as possible. A treatment with IV antibiotics is usually effective.

When do babies have a higher chance of a GBS infection?

(Independent of the result of your swab)

- If the membranes have been broken for over 24h
- If the baby is born preterm (before 37 weeks of pregnancy)
- If the mother has a fever during labour (over 38°C)
- If the mother had a urinary infection caused by GBS in pregnancy
- If the mother had a previous baby with a GBS infection

How can a Strep B infection be prevented?

A GBS infection can be prevented by giving antibiotics to the GBS positive mother and in case of the risk factors above. The antibiotics are given IV (through an infusion) to the mother in the hospital. Usually the treatment consists of a dose of penicilline every 4 hours for as long as the labour lasts. A minimum of 2 doses is required for a maximal protection. In case of a penicillin allergy, a different kind of antibiotics will be prescribed. After the birth, your baby will be on observations for 24 to 48 hours. A blood sample and further tests can be necessary.

Remark: interventions during labour (a vaginal examination, artificial rupture of the membranes, fetal scalp electrodes, an assisted delivery, ...) elevate the chance of an infection.

What are the disadvantages of having antibiotics in labour?

Antibiotics are given IV, which means that they cannot be given at home if you chose to have a home birth.

With the use of antibiotics, there is always a risk of an allergic reaction or more serious: an anafylactic shock. The risk is very rare (1 : 100 000). There is also a chance that your body will get resistant for the antibiotics used, fortunately this is not (yet) the case with penicillin. Finally, thrush infections in mother and/or baby are more prone to appear after a treatment with antibiotics.

The informed decision is now yours!

To create this document, we used recent scientific evidence to be able to inform you as well as possible about GBS in pregnancy. We hope it guides you to decide whether you want to take this test, and in case of a positive result, if you want a preventive treatment with antibiotics. The final decision about this matter will always be made by the parents, not the medical staff.

Resources:

KCE richtlijnen – Federaal Kenniscentrum voor de Gezondheidszorg (BE)
NICE guidelines – National Institute for Health and Care Excellence (UK)
KNOV – Koninklijke Nederlandse Organisatie van Verloskundigen (NL)
NVOG – Nederlandse Vereniging voor Obstetrie en Gynaecologie (NL)