

GROUP B STREPTOCOCCUS

What is it?

Group B Streptococcus, also known as GBS or Strep B, is the most common cause of life-threatening infections in newborn babies in the UK.

GBS is a normal organism which can be found in the intestines of a third of all healthy men and women, and in the vaginas of a quarter of all women, who often show no symptoms. However, it can cause infection in newborn babies, before, during or shortly after birth.

There are 2 types of infection:

- Early-Onset – occurring in the first 2 days of life and usually apparent at birth. It is usually characterised by the rapid development of breathing problems, associated with blood poisoning.
- Late-Onset – which occurs after 2 days and before 1 month (and rarely, up to 3 months). It can present as GBS Meningitis.

Most babies will not be harmed if their mother is infected, but GBS can cause early birth, stillbirth, late miscarriage and complications.

Of the babies infected with GBS, over 80% will develop symptoms such as breathing problems and blood infection in the first two days after birth. Most of these will make a full recovery.

Some babies develop symptoms later, and these babies usually get a type of meningitis called GBS meningitis. One in eight babies infected with GBS will die. Of those that survive GBS meningitis, up to a third are left with long-term mental and physical problems. These can be very severe and can include sight loss, loss of hearing and lung damage.

Why does it happen?

Babies are usually exposed to GBS shortly before or during birth. This happens to thousands of babies with no ill effects: it is not clear why some babies are susceptible to the bacteria.

There are a number of risk factors for GBS infection in newborn babies:

- premature labour (before 37 completed weeks of pregnancy)
- if the waters break prematurely with or without other signs of labour
- if the waters break more than 18 to 24 hours before delivery of the baby
- the pregnant woman has a raised temperature (37.8 C or higher) during labour
- the pregnant woman has been found to carry GBS during the pregnancy
- the pregnant woman has GBS bacteria in her urine at any time during the pregnancy (this should be treated at the time of diagnosis)
- the pregnant woman has previously had a baby with a GBS infection.

What are the symptoms?

Typical symptoms of **Early-Onset GBS** include:

- Grunting
- Lethargy
- Irritability
- Poor feeding
- Very high or low heart rate
- Low blood pressure
- Low blood sugar
- Abnormally high or low temperature
- Abnormally fast or slow breathing rates, with blueness of the skin due to lack of oxygen.

Typical symptoms of **Late-Onset GBS** include:

- Fever
- Poor feeding and/or vomiting
- Impaired consciousness.

Typical symptoms of **meningitis**, including GBS Meningitis include:

- Fever
- Refusing feeds or vomiting
- Shrill or moaning crying or whimpering
- Dislike of being handled; fretful
- Involuntary body stiffening or jerking movements
- Floppy body
- Blank staring, trance-like expression
- Abnormally drowsy, difficult to wake or withdrawn
- Turns away from bright lights
- Pale and/or blotchy skin.

If meningitis is suspected, the baby should be seen by a GP or Casualty Dept immediately – delay could be fatal.

Treatment

Most GBS infection in newborn babies can be prevented by giving women in high-risk situations antibiotics intravenously (through a vein) from the onset of labour or waters breaking until the baby is born.

Approximately 60% of GBS infections in babies are apparent at birth and 90% are apparent within the baby's first two days ('early-onset' GBS infection), so they should be detected and treated in hospital.

Aggressive intravenous antibiotic therapy successfully treats most babies who develop GBS infection but, even with the best medical care, sadly 10-20 per cent of these sick babies die (typically from septicaemia, pneumonia or meningitis) and some suffer long-term problems.

The GBS bacteria may be passed from the hands so everyone (including the parents), whether they know they carry GBS or not, should wash their hands properly and carefully dry them before handling a baby for its first three months of life. The risk to a baby of developing GBS infection decreases with age - GBS infection in babies is rare after one month of age and virtually unknown after three months.

Future Pregnancy

It is possible to be tested to see if you are a GBS carrier, but tests are not reliable, and you may develop a GBS infection after the test. It is important to be aware of the risk factors and what signs of GBS infection to look for in your baby.

Proven methods exist which stop most GBS infection from developing in newborn babies. In the vast majority of cases, pregnancy can be managed so the babies of women who carry GBS are protected - and are born healthy and free from GBS.

Further Information

Group B Strep Support is a UK charity, promoting awareness of GBS and offering support to families affected by it.

Tel: 0870 803 0023

Website: www.gbss.org.uk

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