

Group B Streptococcal meningitis

This form of meningitis is caused by Group B Streptococcal bacteria: *Streptococcus agalactiae*. GBS is the biggest cause of neonatal meningitis (meningitis in newborn babies) in the UK and Ireland, and can also cause septicaemia (blood poisoning) and pneumonia.

The bacteria normally live in the bowels and the vagina and sometimes in the back of the nose and throat. The bacteria can be transmitted from mother to baby before or during birth. An estimated 20–30%¹ of pregnant women carry the bacteria but 99%¹ of babies born to mothers who carry the bacteria are perfectly healthy.

A study, supported by Meningitis Research Foundation, found that the incidence of Group B streptococcal infection in newborns in the UK and Ireland is around 7 cases per 10 000 live births (although this figure varies from country to country; 9 cases per 10,000 live births in Northern Ireland to 6 cases per live births in Republic of Ireland to 4 cases per 10,000 live births in Scotland).²

There are two forms:

- ▶ early onset is normally septicaemia, causing shock and breathing difficulty and occurs at birth or within the first six² days of life. The baby catches the bacteria from the birth canal during labour. Approximately 60–70% of GBS infection is early onset¹.
- ▶ late onset is normally meningitis and causes fever, breathing difficulty, feeding problems and fits. It occurs in the first 7–90² days of life and is probably transmitted when babies are in contact with hands contaminated by the bacteria.

GBS pneumonia can be early or late in onset.

GBS disease can occur in mothers before or after giving birth but this is less common than in babies. Infection in adults is rare although studies in recent years have shown a slight increase³. People with immune problems are at a slightly increased risk from GBS infection.

Mothers of babies affected sometimes feel distressed that they may have been the source of infection. It is important to remember that GBS bacteria are just one of many types of bacteria which naturally live in our bodies, and most babies are not affected by them.

Though the bacteria can be passed on, a person with GBS infection does not pose a risk to others in the community.

Although most babies who get this disease survive with no severe problems, it is a serious illness. Nearly 10 % of babies² affected do not survive, and those who recover may have after effects such as deafness, brain damage and problems with movement and co-ordination. The fatality rate is higher in premature babies.

Antibiotics can be given to women during labour or to babies after birth to kill the bacteria. These women can be identified by bacteriological screening, involving taking swabs from the vagina and rectum, or by risk-factor based screening. Risk factors for GBS infection may include having a previous baby with GBS, premature delivery, prolonged rupture of membranes, or when the mother herself is feverish during delivery, or ill with GBS.

The study mentioned above contributed to UK guidelines developed by the Royal College of Obstetricians and Gynaecologists (RCOG)⁴. In Ireland each hospital has its own protocol on GBS, and these are generally similar to the RCOG guidelines. Screening for GBS is not routinely done in Ireland or the UK.

Immunisation of mothers could also prevent GBS, and several potential vaccines are in development.

Where can I go for further information and support?

Freefone helpline UK 080 88 00 33 44 Ireland 1800 41 33 444

email helpline@meningitis.org

Visit our website www.meningitis.org

References

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