

# Group B Streptococcal Infection

Group B “strep” (streptococcal) bacteria can cause potentially serious infections in newborns. Early infections, usually occurring within a day after birth, are often linked to complications during labor. Later infections may develop more than 7 days after birth. Babies with group B strep infection need treatment in the hospital, including antibiotics.

## What is group B streptococcal infection?

Group B streptococcal infection is a major problem for newborn babies and pregnant women. It is less common than it once was because antibiotics are given right before delivery to mothers with risk factors for group B strep infection. Infants born to mothers who have not received the proper antibiotic at the appropriate time need careful observation and sometimes treatment after birth.

In newborns, group B strep can cause various types of infection, including bacteremia (bloodstream infection), pneumonia (infection of the lungs), and meningitis (infection of the membranes lining the brain and spinal cord). Group B strep can cause serious complications and is particularly dangerous in premature infants. Infants with this infection need hospital treatment, especially with antibiotics.

## What does it look like?

Group B strep infections are classified according to whether they occur early (within 1 week after birth) or late (after the first week).

- *Early infections.* These occur within the first 7 days after birth, most commonly within 24 hours. Sepsis (widespread infection) and pneumonia (lung infection) are most common.
  - *Symptoms.* Your baby may already be sick at birth; usually symptoms appear within the first day. This type of infection sometimes causes the baby to die in the womb (stillbirth).
  - Fever may or may not be present.
  - Fussiness.
  - Lack of energy.
  - Breathing problems may occur, such as grunting or apnea (not breathing), even if the infection isn't in the lungs.
  - Some infants with group B strep infection go into shock, becoming seriously ill very quickly.

- *Late infections.* These occur more than 1 week after birth.
  - Bacteremia (bloodstream infection) and meningitis are most common, although other infections may occur, for example, bone infections.
  - Symptoms are similar to those of early group B strep infection but usually less severe at first. Swollen glands and/or skin infections may appear in the jaw or neck area.
  - Group B strep infections rarely occur after the first few months of life.

## What causes group B streptococcal infection?

Group B strep are common bacteria. However, they usually cause serious disease only in certain types of patients, especially pregnant women and newborn infants. (Group B strep can also cause serious disease in people whose immune systems aren't functioning properly.)

## What are some possible complications of group B streptococcal infection?

- Group B strep infections are a serious disease in newborns. Although treatment is usually effective, there is a risk of death, especially in premature infants and infants with early infection.
- Complications are related to where infections occur. If infection involves the brain (meningitis), then brain damage, including hearing loss, may occur.

## Can group B streptococcal infection be prevented?

- Group B strep infection most often occurs after complications of labor and delivery, such as chorioamnionitis (infection of the amniotic sac), prolonged rupture of the membranes (“bag of waters”), or early labor.
- In early group B strep infection, the bacteria are passed on from mother to baby before or during delivery. Some mothers are colonized with strep bacteria in the gastrointestinal tract or vagina. (“Colonized” means that bacteria are present in the area without causing disease.) Some babies will catch group B strep infection if the mother is infected at delivery.
- Pregnant women should undergo a screening test for group B strep late in pregnancy (between 35 and 37 weeks). If the test shows that group B strep is present, antibiotics should be given to prevent passing the infec-

tion from the mother to the baby. Antibiotics should also be given if:

- A previous baby had group B strep infection.
- Group B strep is detected in the mother's urine during pregnancy.
- No screening test was done and the mother has any of the following:
  - Fever during labor and delivery.
  - Premature birth (before 37 weeks).
  - Early rupture of the membranes (amniotic sac or bag of waters) 18 hours or longer before delivery.
- Antibiotic treatment only prevents the development of early group B strep infection. It does not affect the risk of later (after 1 week) infection.

### How is group B streptococcal infection treated?

- *If your infant has group B strep infection*, immediate hospital treatment is essential. In the hospital, your baby will receive intravenous (IV) doses of antibiotics.

- Antibiotic treatment will continue for a while to make sure the infection is eliminated. Treatment lasts at least 10 days for infants with bloodstream infection, 2 to 3 weeks for those with meningitis, and up to 4 weeks for others.
- Your infant may need other types of treatment as well, depending on the nature and severity of his or her illness.

### When should I call your office?

Call our office any time your newborn has signs of infection:

- Fever.
- Stops drinking fluids; starts vomiting.
- Seems irritable or very sleepy; difficult to arouse.
- Just seems "sicker."
- If your child seems to be having difficulty breathing: breathing fast, chest caving in, ribs sticking out (retractions), belly going up and down, and nostrils flaring. *This is an emergency!* Take your child to the emergency room immediately. 