

Early Onset Neonatal Sepsis

What is early onset neonatal sepsis?

Newborn babies are at greater risk of infection as their immune system (which normally fights infection) is not fully developed.

Most babies are born fit and healthy; however, some may develop an infection before, during, or shortly after birth.

When a baby develops an infection in the first 72 hours of life, this is called early onset neonatal sepsis (EONS).

EONS is potentially serious and even life-threatening.

This leaflet is for parents and guardians of newborn babies at risk of, or being treated for, suspected infection.

How do we assess the risk of early onset neonatal sepsis?

We know there are many risk factors for developing EONS and we assess whether these risks apply to your baby. Risk factors include:

- Preterm birth (born more than three weeks early)
- Signs of infection in the mother during labour
- The waters being broken for more than 24 hours before delivery
- Signs of infection in the newborn baby.

What are the possible signs of infection in a newborn baby?

- Breathing difficulties
- Jaundice (yellow coloured skin and eyes)
- Abnormal temperature
- Low blood sugar levels
- Jitteriness or floppiness
- Altered behaviour (excessive crying or being very sleepy)
- Poor feeding or vomiting.

Your baby will be monitored to look out for these signs.

What happens next?

If there are risk factors or your baby shows signs of an infection then a paediatrician will review your baby. Depending upon the assessment, your baby might just need regular observations or may require a combination of observations and blood tests. If the risk of infection is high, your baby will be started on antibiotics.

The antibiotics are given via a small plastic tube into the vein called a cannula, twice daily at 11am and 11pm. The antibiotic used is very safe for newborn babies. There should be no long-term problems.

With careful monitoring and timely treatment, it should be possible for your baby to stay with you on the postnatal ward even if antibiotic therapy is needed. In only a few cases of newborn infection will admission to the neonatal unit be needed for extra care.

You are always free to ask questions about all aspects of EONS and we welcome discussion about your baby's needs and care.

How long does my baby needs antibiotics for?

Once we are happy there are no signs of infection in your baby and all the blood test results are normal, we will stop the antibiotics. One of the bloods tests we use is called a 'blood culture' (where the laboratory looks to see if bacteria grow from the blood sample). This test takes the longest to process and usually requires 36-48 hours to complete.

If there is no evidence of infection and all the blood test results come back as normal, your baby will be discharged and should be treated the same as any other baby.

If there are signs of infection, the antibiotics may be continued for five days or longer. During this time your baby will be reviewed regularly and we will update you with any changes to their care.

What might happen if my baby is not treated appropriately?

Some of the signs of infection we see (such as fast breathing) may just be part of your baby adapting to life outside the womb. We also know that babies at risk of EONS will not necessarily have infection. However, without tests and a period of observation it is often hard to tell if a baby has an infection or not. It is very important that we identify and treat EONS promptly.

If your baby does have an infection, early treatment usually means there will be no long-term consequences.

Untreated infections may become much more serious and harder to treat. Delay or no treatment might lead to your baby becoming extremely unwell. We do not want this to happen to your baby so our hospital guideline for EONS is designed to identify problems early on and prevent the onset of serious illness.

What should I do when I go home?

For all babies who have risks factors for infection, we recommend that you are aware of the signs of infection. This is particularly important if you have been told you had Group B Streptococcus during your pregnancy, as there is a small risk of the baby developing a late infection.

The signs of infection are:

- Temperature of 38°C or above (<https://www.nhs.uk/conditions/fever-in-children>)
- Rapid breathing or difficulty with breathing
- No interest in feeding or persistent vomiting
- Changes in skin colour: being pale or developing jaundice (yellow skin and eyes)
- Lethargy: being very tired and not waking for feeds, or being listless or unusually floppy
- Changes in behaviour such as inconsolable crying.

You should continue to monitor your baby for any of these signs at home, and if concerned contact your midwife, GP, or go to your local Emergency Department.

Thank you for your time and congratulations on the birth of your baby.

Further information can be found at:

NHS Choices

www.nhs.uk/conditions/pregnancy-and-baby

The NHS choices website contains useful information about many aspects of pregnancy and looking after a new born baby.

NICE

www.nice.org.uk/guidance/cg149/ifp/chapter/About-this-information

NICE (National Institute for Health and Care Excellence) gives detailed information about the neonatal early onset infection national guidelines on which our hospital guideline for EONS is based.

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Disclaimer

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