

Neonatal Jaundice

Information and advice for parents and carers

Paediatrics

What is neonatal jaundice?

Jaundice is the medical term used when a baby's skin looks slightly yellow. The yellowing can also be seen in the whites of their eyes.

Jaundice is very common in newborns – it can be seen in over half of all babies. It is usually nothing to worry about, and most babies need no treatment as it tends to disappear after a couple of weeks.

In some cases jaundice can also be a sign of more serious problems. Babies who develop severe jaundice or jaundice within the first 24 hours of life often need urgent treatment to avoid serious complications such as hearing loss and cerebral palsy. It is important to note that this is extremely rare and that with the right treatment this small risk is reduced even further.

What causes jaundice?

Most cases of jaundice are caused by the baby's liver being immature at birth. One of the functions of the liver is to remove bilirubin which is a yellow chemical that is made during the normal breakdown of red blood cells. As newborn babies have a greater number of red blood cells than older children, they make more bilirubin, and their liver cannot process it all. Bilirubin therefore builds up in the blood and causes jaundice. It is usually cleared over the first few weeks of life as liver function speeds up.

Breastfed babies may appear jaundiced for longer than bottle-fed ones because breast milk contains substances that keep the liver working slowly. This is known as breast milk jaundice and if the baby is healthy and thriving it is considered generally normal. There is no need to stop breastfeeding in this situation, as there are so many other good things in breast milk.

Other causes

In some cases jaundice may be caused by one of the following:

- Blood group differences between mother and baby - this leads to more rapid blood cell breakdown causing early and sometimes severe jaundice.
- Infections
- Blockages to bile drainage
- Liver problems
- Blood cell problems

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What are the symptoms of neonatal jaundice?

Jaundice usually appears 2-3 days after birth. It is worrying if it develops in the first 24 hours. If this happens inform the midwife or doctor straight away as your baby will need urgent treatment.

The symptoms of jaundice are:

- The skin looking slightly yellow, a bit like a sun-tan.
- The whites of the eyes being yellow.
- In babies with dark skin, the yellowing can be noticed more easily in the whites of their eyes as well as on the soles of the feet and palms and/or inside their mouth.

Most babies with jaundice do not have any other symptoms. If your baby has any of the following symptoms contact your midwife, health visitor or doctor as soon as possible:

- poor sucking/feeding
- sleepiness
- dark urine
- pale stools (the stools of a newborn baby should be yellow or green)

The jaundice should settle by 2 – 3 weeks of age. If your baby still has symptoms after this time they will need to be assessed by a doctor.

How is neonatal jaundice diagnosed?

After your baby is born, before going home the midwives and doctors will check for jaundice by looking for the symptoms in a well-lit room. If it is noticed on the first day of life, your baby will be kept in hospital for a few days for observation and treatment.

When your baby has gone home your midwife and health visitor will check for jaundice when they visit you. You should also keep an eye out for the above symptoms and see your doctor if your baby has any of them.

Babies with more significant jaundice may need a heel prick blood test to check the level of bilirubin in their blood. If the result is high, then the baby will require treatment. All babies who require treatment for jaundice will also have other blood tests to see if there is a worrying cause for the jaundice.

If your baby's jaundice last for longer than 2 -3 weeks (prolonged jaundice), other blood tests may be carried out to rule out other underlying conditions.

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How is neonatal jaundice treated?

Mild jaundice

If your baby is only thought to have mild jaundice, then the midwife or doctor may simply want to check them again the next day to see if it is settling. As long as your baby is well, and the jaundice is mild there is no need for any special treatment. It is important for babies to be well hydrated, so it is very important to continue feeding your baby.

More severe jaundice

In more severe cases, a jaundiced baby needs phototherapy treatment. This involves the baby being placed on their front in a cot, under a UV (ultraviolet) lamp. The baby is usually naked and has its eyes covered up. You will be encouraged to take your baby out from the lamp (cot) for short breaks for feeds, nappy changes and cuddles if they are having phototherapy treatment. The treatment is continued until 2 readings of bilirubin levels are below the level that needs treatment.

What is the benefit of phototherapy?

Phototherapy treatment alters the bilirubin and makes it easier for your baby to get rid of it, therefore reducing the bilirubin level in their blood.

Are there any risks to phototherapy treatment?

Some babies having phototherapy may develop a mild rash and diarrhoea. It is also important to continue feeding them as normal or they may get dehydrated. Whilst having this treatment your baby will be monitored carefully so that these problems can be identified and treated.

Very severe jaundice

If the jaundice is very severe and bilirubin levels are very high, an exchange blood transfusion may be needed, which involves removing some of the baby's blood and replacing it with new blood through the umbilical cord blood vessels. This procedure will only be considered if phototherapy has not worked and is carried out in an intensive care unit. After exchange transfusion a baby will usually need phototherapy for another few days. If your child needs exchange transfusion then he/she will be transferred to the neonatal intensive care unit where this will take place.

What is the benefit of an exchange blood transfusion?

An exchange blood transfusion replaces the baby's blood with new blood which will reduce the level of bilirubin in their blood.

Are there any risks to an exchange blood transfusion?

The risks of having an exchange blood transfusion are:

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- bleeding from the cord
- infection in the bloodstream or gut
- blood volume changes (if your child loses a lot of blood they may have low blood pressure)
- electrolyte abnormalities (abnormality of the minerals in the body e.g sodium , calcium and potassium)
- Some children develop slow heart rate and may even stop breathing during the procedure especially if they were very ill before the procedure

Your baby will be closely monitored by the intensive care team while having an exchange blood transfusion so that any problems can be treated quickly.

Other causes of jaundice

If the jaundice is caused by something else, such as an infection, this will have to be treated as appropriate. If your baby's jaundice was caused by a blood group difference between mother and baby, your baby will need to take folic acid for 2 months to help them make more red blood cells.

What are the risks of not having treatment?

When bilirubin levels in the blood are very high, it can pass into the brain. Without prompt treatment, a build up of bilirubin in the brain can lead to a condition called kernicterus which can lead to brain damage or even death, so it is important that high levels of bilirubin are treated immediately.

Follow-up

If your baby's jaundice has not settled after 2-3 weeks they will need to be seen by a doctor for medical assessment as this could be a sign of other serious problems. In most cases of this the tests show no serious underlying cause, and the jaundice does eventually disappear. Please see 'Prolonged Jaundice' leaflet for more information.

It is very rare for a baby to have long-term problems due to jaundice. The doctors will decide if your baby needs to be seen again at the hospital and will arrange an appointment if needed.

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Further information

If your child has been treated in hospital and, within 24 hours of them being discharged, you have any questions or concerns please contact the ward they were treated on:

Priory Ground 0121 507 3927	Lyndon 1 0121 507 3800
Lyndon Ground 0121 507 3717	Paediatric Assessment Unit (City Hospital) 0121 507 4019

After this time, or if your child has not required hospital treatment, please contact your GP, health visitor or NHS Direct.

NHS Direct
0845 46 47

You can also find further information on the websites below:

NHS Choices
www.nhs.uk/conditions/Jaundice-newborn

Children's Liver Disease Foundation Yellow Alert Campaign
www.yellowalert.org

For more information about our hospitals and services please see our website:

Sandwell and West Birmingham Hospitals NHS Trust
www.swbh.nhs.uk

Sources used for the information in this leaflet

National Institute for Health and Clinical Excellence, CG98 'Neonatal Jaundice', May 2010

If you would like to suggest any amendments or improvements to this leaflet please contact the communications department on 0121 507 5420 or email: swb-tr.swbh-gm-patient-information@nhs.net



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