



Jaundice in Newborn Pēpi/Babies

Parent/Caregiver/Whānau Information – Neonatal Services

Jaundice is the name given to the yellowing of the skin and the whites of the eyes. Jaundice in newborn pēpi/babies is very common, is usually harmless when high levels are avoided. Sometimes treatment is needed in the first 10 to 14 days, to manage the underlying cause of the jaundice.

What causes jaundice?

When pēpi/babies are born, they need to clear the breakdown of extra red blood cells that was previously dealt with by the placenta. This breakdown of red blood cells produces large quantities of the pigment bilirubin which is yellow. Bilirubin is normally processed by the liver and passed out of the body through the bowels in poo (stools/faeces). However, newborn pēpi/babies are not very good at this so the extra bilirubin is stored in the skin and eyes and makes them look yellow. This tends to start at the head and face and spreads downwards.

Within a few weeks the number of red cells broken down decreases and the liver is able to break down the bilirubin more quickly. Therefore, for most pēpi/babies the jaundice disappears by the time they are 2 weeks old. This type of jaundice is called physiological jaundice.

Which pēpi/babies are more likely to develop jaundice that needs treatment?

Born premature (before 37 weeks) – liver immature

Born with high red blood cells numbers (polycythaemia) **or bruising** from delivery, eg. large bruise on the head

Different blood type from māmā/mother – māmā/mother's body makes antibodies that attack pēpi/baby's red blood cells. This happens when:

- Māmā/Mum's blood group is O and pēpi/baby's blood group is A or B (ABO incompatibility)
- Māmā/Mum's Rhesus factor (a protein on red blood cells) is negative and pēpi/baby's is positive

Infection can sometime cause or increase jaundice.

Genetic conditions are rare including hereditary spherocytosis and G6PD deficiency – increased number of red blood cells break down very quickly and easily.

Severe liver disease is a rare cause. Urgent tests are needed at any age if the poo is pale or urine dark.

Not getting enough breastmilk/dehydration, especially during the first few days of life when breastfeeding is being established.

Breastfeeding jaundice is a common cause of late jaundice in term infants, defined as jaundice still present at 2 weeks in a term pēpi/baby and 3 weeks in a preterm pēpi/baby. It is not harmful and you should keep breastfeeding. Some tests will be arranged to check.

Signs and symptoms

- Skin and white of eyes look yellow.
- Some pēpi/babies with high levels will be sleepy, slow with feeding and may be floppy.

Jaundice is not always easy to see in some ethnic groups of pēpi/babies.

Testing for jaundice/treatment

Your newborn pēpi/baby should be assessed for jaundice at every nurse or doctor check, especially in the first 72 hours. This will include looking at your naked pēpi/baby in bright light (natural day light if possible) to see if they look yellow. There are two ways of checking the bilirubin level; by taking a small blood sample or using a transcutaneous bilirubinometer. We have charts to decide if treatment needs to start.

Treatment

Phototherapy: your pēpi/baby will be dressed just in a nappy and laid under a special artificial light or wrapped in a special blanket where light of a certain wave length helps the body to break down the bilirubin and pass it out of the body.

Your pēpi/baby's eyes will be covered with a soft mask and they should be given routine eye care. Your pēpi/baby may be placed in a cot or an incubator. Your pēpi/baby's temperature will be checked regularly, as well as whether they have been feeding enough. This is done by checking how wet your pēpi/baby's nappies are. Regular feeding is important and you will be offered feeding support during this time. Pēpi/babies with jaundice need to be well hydrated and nourished, but they do not require extra water.

Occasionally, a special blood transfusion called an exchange transfusion or intravenous immunoglobulin may be required. Your doctor will explain this to you before asking for your consent.



Checking to see if phototherapy is working

The level of bilirubin in your pēpi/baby's blood will need to be checked with a blood test regularly after starting phototherapy. This is to see if the treatment is working. At this time we may do other blood tests including one to check your pēpi/baby's blood type.

When your pēpi/baby's jaundice does get better, phototherapy can be stopped. Your pēpi/baby will need another blood test around 12 hours after stopping treatment to make sure the jaundice has stayed at a safe level and not returned to a level that would need further treatment.

You will be kept fully informed of your pēpi/baby's condition and treatment and given lots of support and encouragement in caring for your pēpi/baby.

What next?

For most pēpi/babies, jaundice clears up within a few days and they can be discharged home safely once they are approaching term gestation (if born early), medically well, feeding and growing.

For more information about:

hospital and specialist services, go to www.cdhb.health.nz | your health and medication, go to www.healthinfo.org.nz

For more information on jaundice in babies: <https://www.kidshealth.org.nz/jaundice-babies>