Jaundice in your newborn baby

The most common cause of jaundice in a newborn baby is ‘physiological jaundice’. It occurs in over 50% of term babies and up to 80% in preterm babies.

What is physiological jaundice?
When your baby is inside your womb and is relying on your circulation, baby needs a high level of red blood cells to carry enough oxygen from the placenta around his/her body.

Once your baby is born and breathing for him/herself he/she does not need as many of the red blood cells and begins to break them down in the liver. This is called haemolysis.

What is produced at the end of this breakdown process is a yellow pigment called bilirubin. This is what causes your baby to look yellow.

It usually appears on the 2\textsuperscript{nd} or 3\textsuperscript{rd} day after your baby is born and is very common. Contact your midwife or GP immediately if it appears in the first 24 hours.

The degree of yellow can be affected by your baby:
- having a high red blood cell count
- being slow to feed
- being premature and having an immature liver

What else may cause jaundice?
Occasionally there may be a rarer form of jaundice including:

Rh incompatibility
If the mother’s blood group is negative and the baby’s blood group is positive, antibodies may be made by the mother to protect her against what the body recognises as different cells. These antibodies invade the baby’s blood stream and surround his/her red blood cells causing them to break down. This is called ‘Haemolytic Disease of the Newborn’. It is usually prevented by screening during pregnancy and by the mother having an ‘Anti D’ injection to prevent the antibodies being produced.

ABO incompatibility
Different blood groups already have antibodies present. This means that if the mother’s and the baby’s blood group are different and they become mixed for some reason, the mother’s antibodies will breakdown the baby’s red blood cells, as happens with Rh incompatibility.

Both of the above conditions are usually diagnosed quickly, as your baby will become jaundiced within 24 hours of birth.

Bruising
Forceps or Ventouse delivery can cause some bruising, which means red blood cells get broken down - making bilirubin. Rarely, other forms of jaundice may be caused by infection or metabolic disorders.
What symptoms may my baby have?
Your midwife or GP needs to check your baby if you notice that your:

- baby’s skin is pale/yellow or their eyes appear yellow and the baby is sleepy and not feeding.
- baby’s urine is dark and/or their stools are pale and chalky.

This is especially important if any of these signs occur in the first 24 hours.

Not all babies need further checks. However, if your midwife thinks that your baby does, she will discuss this with you and ask for your permission to do a serum bilirubin test (SBR). This test will measure the amount of bilirubin in your baby’s blood.

How is the test done?
Your midwife can check your baby’s bilirubin level either by:

- using a Transcutaneous bilirubinometer (TCB): a small handheld monitor which is placed against your baby’s skin, either on the postnatal ward or in community postnatal clinics.
- taking a blood sample with a heel prick test. The sample will be sent to the laboratory to measure the amount of bilirubin in your baby’s blood.

If the result is above a certain level, your baby will need to be admitted to hospital for treatment and regular blood tests to check that the level is falling.

How is it treated?
If bilirubin is above a certain level your baby will be treated with phototherapy, a special light treatment to help breakdown bilirubin more quickly so baby can pass it through his/her bowel or urine.

Your baby will usually be put into a cot with the light underneath him/her and with a special cover to stop him/her getting cold. This is called a ‘bilibed’. Your baby will need to wear eye pads to protect them from the strong light. A midwife/nurse will show you how the bilibed works and will be able to answer any of your questions about treatment. Your baby will require regular blood testing whilst being treated to check levels are falling.

You will also be asked to feed your baby regularly so that he/she is getting enough nutrition and to stop him/her getting dehydrated due to the lights.

Can I stay with my baby?
Babies are kept with their mums on the ward unless they need more specialised treatment i.e. on the Neonatal Intensive Care Unit. You are able to touch and talk to your baby and feed him/her as normal, although you will be advised to feed more frequently.

Will jaundice cause any problems in the future?
Your baby will receive treatment as soon as it is needed and the paediatrician will work closely with your midwife/nurse to prevent any potential problems.

How long will the jaundice last?
The time will vary for different babies depending on the reason for the jaundice and the treatment being given. Usually if your baby is feeding well and is having phototherapy it will improve within a couple of days. If your baby is still showing signs of jaundice after 2 weeks (or 3 if born before 37 weeks) you need to ask the GP to review baby for more investigation.