

Phototherapy (light treatment)

Your baby is receiving phototherapy, also known as light therapy. Phototherapy for newborn babies is necessary if they have become very jaundiced (yellow colour). It is a precautionary measure to prevent bilirubin levels becoming too high.

Jaundice

Many newborn babies become yellow during the first days after birth. The medical term for this symptom is jaundice (icterus). Jaundice is caused by immaturity of the liver which is not yet capable of excreting the bile pigment bilirubin. This bile pigment is the result of increased breakdown of red blood cells as is common in every newborn baby. This means that there is an increased level of this yellow pigment in the blood, causing the skin to become yellow.

Is jaundice harmful?

Jaundice usually clears by itself. After a few days or a week the liver matures and is then capable of excreting the bile pigment. If the bile pigment level is very high, brain damage may occur. To prevent this, phototherapy may be initiated.

Causes

Jaundice occurs more often in premature babies than in full-term babies and does then last longer.

Possible causes of jaundice are:

- Immaturity of the liver.
- Difference in blood groups of mother and baby (blood group antagonism or Rhesus disease).
- An infection.
- Severe bruising, for example, due to a forceps delivery or vacuum extraction.
- Insufficient fluid/food in the first days of life.

Progression

Sometimes it is hard to see whether a baby's jaundice is extremely severe. For this reason a blood sample is tested. The bilirubin levels are assessed in the hospital's laboratory. Jaundice is usually at its most severe on the fourth or fifth day after birth and tends to reduce slowly after that. In premature babies jaundice is at its most severe between the fourth and the sixth day.

Phototherapy

Phototherapy breaks down bilirubin and reduces jaundice. During the treatment, the baby lies naked and on its back in an incubator. When the baby is watched on the monitor, prone position is also allowed. This way most of the body will be exposed to the light.

Your child will wear glasses to protect its eyes. A biliblanket (light mat) is placed underneath the baby and a lamp is also placed from above.

The length of time a child receives phototherapy depends on how the jaundice progresses. The broken-down bilirubin leaves the body via the urine or faeces.

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Feeding

In principle, it is advised to give all food by bottle during phototherapy, so that the phototherapy does not have to be discontinued and your baby is guaranteed to receive the required amount of nutrition. If you are breastfeeding, you can use a breast pump and give your baby bottled breast milk. In consultation with nursing staff, you may feed and care for your baby during phototherapy.