

Phototherapy (light treatment)

Introduction

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 bilirubine 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 bilirubine. 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, it may have an adverse effect on the baby's brains. This could eventually lead to deafness. This mainly applies to premature babies, but extreme jaundice may also have adverse effects on full-term babies.

Causes

Jaundice occurs more often in premature babies than in full-term babies and does then last longer. It is not always clear how it is caused.

Various causes are possible:

- Difference in blood groups of mother and baby, such as, for example, Rhesus-disease
- An infection
- Severe bruising, for example, due to a forceps delivery or a vacuum extraction
- Insufficient fluid/food in the first born days

Progression

Sometimes it is hard to see whether a baby's jaundice is extremely severe. For this reason a blood sample is tested. The bilirubine 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

If it is decided that your baby needs phototherapy, he/she must temporarily be admitted to the incubator room.

High levels of light cause the bilirubine to break down and the jaundice will reduce. The baby will lie naked on his/her back underneath the lamp. If the baby is on a monitor, he/she can be positioned on his/her tummy. This way, most of the body will be exposed to the light.

Your baby will have a mask on to protect the eyes. Lamps used are blue and white fluorescent tubes. The baby lies on a biliblanket (fibre-optic blanket).

The length of time a baby receives phototherapy depends on how the jaundice progresses, but is usually three to five days.

The broken down bilirubine leaves the body, for example, via urine or faeces.

Feeding

In consultation with nursing staff you may feed and care for your baby during phototherapy.

In principle it is possible to continue breastfeeding, but there may, however, be situations where we would advise you to temporarily stop breastfeeding. If breastfeeding must be stopped, the baby can be fed with expressed breast milk by means of cup, bottle or tube feeding.

Notes on this leaflet

If any information in this leaflet is unclear or incomplete, please notify us. You can share your remarks with us via voorlichting@zha.nl.