

# NEONATAL JAUNDICE

## What is jaundice?

The word jaundice comes from the French *jaune*, which means yellow. This is why a baby who is described as jaundiced looks yellow.

## What is bilirubin?

Bilirubin is a yellow/reddish pigment that is a product of red blood cells (RBC) being broken down. The deposition of bilirubin in the fat layers causes the yellow colouring of the skin. Newborn infants RBC's break down more quickly than adults, predisposing them to jaundice. Also the newborn liver takes several days after birth to produce the enzymes that break down bilirubin. Preterm infants are more likely to develop jaundice than term babies.

## Are there different types of jaundice?

The most common type of jaundice is called physiological jaundice. This occurs with the normal process of RBC's breaking down and the liver's temporary delay in maturation. This may occur as a result of bruising from vacuum extraction or forcep deliveries where more than the usual number of RBC's are being broken down. This may result in jaundice lasting slightly longer than normal and may or may not require the use of phototherapy.

Other types of jaundice may be caused by incompatibilities between the mother and baby's blood group. The most common of these are Rh and AB blood group incompatibilities. Antibodies to the baby's RBC's have crossed the placenta from the mother and break down the RBC's, resulting in jaundice and sometimes anaemia (not enough RBC's).

Other rare causes include congenital defects where the liver is unable to properly eliminate bilirubin.

## Why do we treat jaundice?

The yellow discolouration of the skin is not a problem, however if bilirubin is deposited in the tissues of the brain this may cause long term problems. High enough levels of bilirubin can be toxic to the brain resulting in deafness or problems with mental development.

## How is jaundice treated?

The nursing and medical staff will observe the degree of jaundice in your infant. If there is concern a blood test will be ordered to look at the Serum Bilirubin level (SBR). Levels that require treatment are worked out on the baby's gestation and age in hours/days.

## What is the blue/white phototherapy light?

Phototherapy lights are used to accelerate the rate which bilirubin is removed from the body by changing the form of the bilirubin into one that is easily excreted. The skin must be exposed for the phototherapy to work successfully. Repeat blood tests will be performed to determine how effective the phototherapy has been. Some babies may require extra fluid in the form of top-up feeds or intravenous fluids to increase the elimination of bilirubin.



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### **Are there side effects of phototherapy?**

Research has shown that phototherapy is a very safe way of reducing bilirubin levels. There is some risk to the retina of the eye, which is why the nursing staff will cover your baby's eyes. The skin will not burn or tan, but it may give the baby a "bronzed" look.

The baby's stools may become loose and green in colour. This is a temporary effect and indicates that the treatment is working as more bilirubin is being passed in the urine and stools.

The nursing staff will monitor the baby's temperature closely. As parents you can still care for your baby with the help and support of the nursing staff.

If you have any further questions please ask any of the nursing or medical staff for further information.

fact sheet