

## JAUNDICE IN THE NEWBORN

### WHAT IS JAUNDICE

Jaundice is a yellow coloration of the skin and tissues. Over 50% of normal newborn babies appear jaundiced in the first week of life. It usually appears after the first 24 hours, peaks by 3 – 5 days, and disappears by 10 days. In most babies, jaundice is physiological, reflecting changes that the baby undergoes after being born. In some babies, however, jaundice can be pathological, being caused by an underlying medical problem.

### WHAT CAUSES JAUNDICE

The yellow color is due to the presence of a pigment called *bilirubin*. Physiological jaundice is the result of the breakdown of red blood cells (RBC's). Newborn babies have a lot more RBC's than they need after birth and so the body breaks these down, releasing pigments that then form bilirubin. The liver gets rid of the bilirubin, but the newborn liver may not be able to cope with a very heavy load of bilirubin, which then accumulates in the tissues and causes the baby to appear jaundiced.

### IS JAUNDICE DANGEROUS

In most cases, physiological jaundice is not harmful. However, if the level of bilirubin in the blood is very high, it can cause brain damage and should be treated. Pathological jaundice is much rarer and should be investigated thoroughly and managed accordingly. Your baby's doctor will determine what type of jaundice the baby has and whether any treatment is necessary.

### BREAST FEEDING AND JAUNDICE

Breast-feeding has been associated with increased levels of bilirubin and about 30% of breast fed babies have prolongation of jaundice. In most cases, this will resolve spontaneously and you should try to breast feed your baby as frequently as possible. In some cases, where the level of jaundice is high, your pediatrician may ask you to temporarily stop breast-feeding for 48 hours. This helps to reduce the jaundice and you should pump your breast milk during this period so that you continue to produce milk.

### WHAT CAN I EXPECT FROM THE DOCTOR

The doctor may ask for blood tests from the baby to check the level of bilirubin and also the type of jaundice. Depending on the results, further blood and other tests may be required. Please remember that in the majority of babies, jaundice is physiological and easily managed.

### HOW IS PHYSIOLOGICAL JAUNDICE TREATED

Most babies with physiological jaundice do not need treatment, other than having the level of bilirubin monitored. If the level is high, the baby may need *Phototherapy*. If the level is very high, an *Exchange Transfusion* may be performed. Both these techniques will require the baby to stay in the hospital.

### WHAT IS PHOTOTHERAPY

Phototherapy is a technique in which the baby is exposed to a particular type of blue light that helps to reduce the bilirubin level. The baby will be kept with minimal clothes so that as much skin as possible can be exposed to the light. The baby's eyes are very sensitive and will be covered with a patch to protect them. Phototherapy is not harmful and in most cases will be all that is needed to treat the jaundice.

#### WHAT IS AN EXCHANGE TRANSFUSION

In very occasional instances, if the doctor determines that the level of bilirubin in a baby with physiological jaundice is so high that it may be harmful to the baby, he may replace part of the baby's blood with fresh blood from the blood bank that does not contain bilirubin.

#### SUMMARY

Jaundice in the newborn baby is mostly normal and not harmful. If your baby appears yellow and if this coloration is getting deeper, please have your baby examined by the pediatrician. The prognosis for physiological jaundice is excellent and the majority of babies recover fully without any after effects.