

What is Jaundice?

Adapted from an article by the Pediatricians and Nurse Practitioners of the Newborn Pediatrics Section at Pennsylvania Hospital in Philadelphia, USA.

Jaundice (Fr.:yellow) In a newborn is a normal event which happens in most infants. While in the Womb, the baby makes more red blood cells than he/she will need once they enter the world. Shortly after birth these extra red blood cells are broken down by the body. Hemoglobin, the molecule that carries oxygen in the blood is converted to bilirubin. As the level of bilirubin increases in the blood stream, some of it may deposit in the skin and underlying tissue and the undertone of the baby's skin begins to look yellowish, and the whites of the baby's eyes may also look yellow. In a jaundiced baby, the level of bilirubin in the blood is generally above 5mg/dl. This yellow color may not be obvious because of the natural skin pigmentation or because of the lighting of the room.

It is important to know that six out of every 10 newborns develop jaundice during the first week of life. Thus, nearly 60% of the 4 million babies born every year have some level of jaundice. This is called hyperbilirubinemia. Babies who are naturally bruised in the process of delivery, or do not get adequate milk intake, or have blood type incompatibility with their mother are more likely to get excessive jaundice. Medical conditions that result in too much production of the bilirubin or those that delay the clearance of jaundice add to the risk of excessive jaundice.

HOW DOES MY BABY GET RID OF EXCESS BILIRUBIN?

The baby's liver works to clear the extra bilirubin out of the body. It is also cleared as the baby begins to pass bowel movements and the bowel movements begin to appear yellow. The process of clearing the extra bilirubin normally takes from three to five days of age. It is expected that most babies will get somewhat jaundiced during this time. This delay is because while the baby was in the womb, the placenta was clearing the bilirubin and now the liver has to mature before it can eliminate the bilirubin.

WHY DO YOU BOTHER TO CHECK THE BILIRUBIN LEVELS?

Sometimes the level of bilirubin in a baby's blood can get too high. If this happens, it is possible that the bilirubin can cause neurological problems. Some early signs of problems may include hearing function abnormalities and at higher levels, this may lead to severe brain damage. This is why many babies will have at least one blood test before leaving the hospital: so that the physician will have an idea of how well the baby is getting rid of the extra bilirubin and to predict if the baby will be at risk of having hyperbilirubinemia during the first week of life.

If the bilirubin level is either low or moderate, your physician will feel comfortable sending the baby home, but will tell you that the blood level needs to be rechecked. This may need to happen the day after the baby goes home or possibly the day after that. This is because the level usually rises for at least three days and most babies leave the hospital before they are three days old.

HOW DO I GET THE BILIRUBIN RECHECKED ONCE MY BABY GOES HOME?

If your baby needs to have the bilirubin level rechecked after the baby goes home, your physician will try to make plans that are convenient for you. Some insurance plans will provide a home visiting nurse who will come to your house to draw the baby's blood and then call you with the results. Many pediatricians can make plans to have the level checked at the doctor's office or on the Maternal Child Health Unit. Your pediatrician will then follow the results, letting you know if you need to make any adjustments in feeding, or if you need to have the level draw again at a later time.

WHAT IF THE LEVEL GETS TOO HIGH?

If at any time it is determined that the level is higher than the physician feels safe for the baby and in order to prevent any harmful effects, they may want to help the baby with the process of clearing away the extra bilirubin. The first way this is done is to place the baby under special light treatment called phototherapy. These lights work by changing the bilirubin into another less toxic substance which is more easily cleared out of the body. If the baby is under phototherapy, the more time they spend under the lights, the quicker the bilirubin will be cleared away. It will be alright for you to take the baby out of phototherapy for feeding, but then it is best to put the baby back under the lights so the therapy can work as quickly as possible.

HOW LONG WILL MY BABY HAVE TO STAY UNDER PHOTOTHERAPY?

If your baby needs to receive intensive phototherapy, he/she will need to stay in the hospital, or be readmitted to the hospital for phototherapy, or have home phototherapy (supplied by Durable Medical Equipment Supplier) until the bilirubin is down to level which the doctor feels is safe to stop the phototherapy. Every baby is different in the time that they will need to be under phototherapy.

DOES HOW AND WHAT I FEED MY BABY AFFECT THEIR BILIRUBIN LEVEL?

Since one of the ways bilirubin is cleared from the baby is through the bowel movements, the more milk the baby takes in, the more bowel movements will be produced, and the faster the bilirubin will be cleared away. For this reason, if the levels are getting high or if the levels are high enough to begin phototherapy, and you are breastfeeding, your lactation educator may recommend that you breastfeed more often to ensure that the baby is getting as much milk as possible.

DOES THE JAUNDICE RECUR?

Jaundice observed in newborn babies is generally not associated with recurrent jaundice similar to that observed in adults unless your doctor has identified a specific reason for the jaundice in your baby.