Editorial

Awareness about New Born Jaundice

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Editor

Most newborn babies turn yellow at some point. This condition, known as jaundice, is a very common and usually normal part of the newborn period. However, in very rare cases, it can lead to or be a symptom of a more serious problem. That is why parents should be aware of it.

The yellow colour of newborn jaundice is caused by elevated levels of bilirubin in the blood. Bilirubin is primarily produced by the breakdown of red blood cells. It is processed in the liver to make it easier for the body to eliminate via urine and stool. When it comes to removing bilirubin, newborn livers require some time to get up and running. Newborns have more red cells than older children and adults, and those newly formed red cells do not last as long as red cells produced as babies grow older. Jaundice is caused by the combination of these two factors.

Jaundice typically occurs within the first two to five days of life and lasts one to two weeks. It may last longer in breastfed babies; we don't know why this occurs, but it isn't cause for concern. Jaundice may actually protect babies because bilirubin is an antioxidant that may help newborn infants fight infection. Another reason why parents shouldn't be concerned about a little yellowness is that it is not only temporary, but it may also be assisting their baby as he or she leaves the security of the womb.

Jaundice may occasionally indicate a problem: However, jaundice can be a symptom of another problem, and when bilirubin levels are extremely high, it can have long-term effects on the brain. Kernicterus is a very rare condition that affects less than 1% of infants. Many conditions increase the likelihood of high bilirubin levels, including:

- Dehydration or a lack of calories. This is most common when babies are exclusively breastfed and a breastfeeding problem goes unnoticed.
- Incompatibility with ABO or Rh. When the mother and baby have different blood types, it can cause more red cell breakdown than usual. Obstetricians are well aware of the problem, and all pregnant women should have blood tests to assess their risk.
- The systems that work to eliminate bilirubin may not be ready in premature babies.
- Infection or intestine obstruction. Jaundice is not always the only symptom of this.
- A cephalohematoma or bruising (a lump or a bruise on the head). Both of these things can happen during a difficult birth. This causes more red cells to degrade.
- Diseases of the liver. A variety of liver issues can make it difficult for the baby's body to eliminate bilirubin.
- Diseases that cause an important enzyme to malfunction. One common disease is glucose-6-phosphate dehydrogenase (G6PD) deficiency, which can lead to the breakdown of red blood cells. Other diseases, such as Gilbert syndrome or Crigler-Najjar syndrome, cause a problem with an enzyme that is essential for bilirubin elimination.
- Factors of genetic origin. All of these variables are not well understood. If one baby in a family has jaundice, future babies may be at risk as well. Babies of East Asian ancestry, for example, have higher bilirubin levels.

The importance of preventing and assessing jaundice is emphasised in the new guidelines. Doctors and parents can collaborate to Check to see if the mother's blood type and antibodies have been tested. If there is a problem, the baby should be examined as well. Consider not only the mother's blood type, but also gestational age, family history, any bruising, how early jaundice appears, and other factors. Check bilirubin levels at 24 to 48 hours of life, or sooner if a newborn appears jaundiced or is going home sooner. Ensure that mothers receive adequate feeding assistance. When babies do not get enough to eat during their first three to five days of life, they have high risk of getting jaundice.

Phototherapy is the most commonly used treatment. The baby is placed under a special light (or wrapped in a special blanket with the light inside it) to assist the body in eliminating bilirubin. This method is both safe and effective. When bilirubin levels are extremely high and there is concern about brain damage, therapies such as exchange transfusion, in which blood is removed and replaced with new blood, are required. This is, however, extremely rare.

Feeding is also an important part of treatment because it helps the body eliminate bilirubin through the blood and urine. Frequent feeding of a newborn also aids in the prevention of jaundice.