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CAUSE OF JAUNDICE IN NEWBORNS

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ABSTRACT

The present study reports about the causes of jaundice in newborns, jaundice is the most frequent clinical problem in the neonatal, we have observed from the study that Jaundice, is a life threatening disorder in newborns. It is a multi-factorial disorder with many symptoms. Generally, the physiological jaundice is the most prevalent type however in some regions pathological jaundice is also common. This review article focuses on a brief introduction to jaundice, its types and causes, measuring the bilirubin level, clinical approaches towards hyperbilirubinemia, and different previsions, measures for the parents of babies suffering from hyperbilirubinemia.

Keywords : hyperbilirubinemia, Jaundice, newborns, kernicterus, neonatal, Infants.

INTRODUCTION

Jaundice is a yellow tint to newborn's skin and the white part of the eyes. It is a sign that there's too much bilirubin in the baby's blood. The word for having too much bilirubin in the bloodis hyperbilirubinemia Jaundice usually appears in the first 5 days of life. Many babies have left the hospital by the time jaundice starts. So your doctor may want to do a follow-up exam when your baby is 3 to 5 days old.

Most babies have mild jaundice. It usually gets better or goes away on its own within a week or two without causing problems. But jaundice should be taken seriously. In rare cases, if the bilirubin level stays high and isn't treated, it can cause brain damagecalled kernicterus. This can lead to serious lifelong problems.

Plate 1



Plate 1: shows yellow Color of skin

CAUSES

Jaundice occurs because your baby's body has more bilirubin than it can get rid of. Bilirubin is a yellow substance that's made when the body breaks down old red blood cells. It leaves the body through urine and stool. When you're pregnant, your body removes bilirubin from your baby through theplacenta. After birth, your baby's body must get rid of the bilirubin on its own.

In most cases, babies have what's called physiologic jaundice. It occurs because their organs aren't yet able to get rid of excess bilirubin very well. This type of jaundice usually appears about 24 hours after birth. It gets worse until the third or fourth day, and then it goes away in about a week.

In rare cases, jaundice may be caused by other things, such as an infection, a problem with the baby's digestive system, or a problem with the mom's and baby's blood types (Rh incompatibility). Your baby may have one of these problems if jaundice appears less than a day after birth.



Plate 2

Plate 2: Shows Effects of Jaundice in newborns

TYPES OF JAUNDICE

There are three types of jaundice:

- haemolytic jaundice caused by destruction of red blood cells. This causes increased bilirubin formation and anemia
- obstructive jaundice caused by a blockage in the pathway where bilirubin is made in the liver cells and where bile goes into the duodenum
- hepatocellular jaundice caused by damage to liver cells. The damage could be from a viral infection or toxic drugs.

SYMPTOMS

If a newborn has jaundice, his or her skin and the white part of theeyes will look yellow. The yellow color shows up first in the baby's face and chest, usually 1 to 5 days after birth.

A baby whose bilirubin level is high may:

- Get more yellow.
- Be sluggish and not suck well.

- Be cranky or jittery.
- Arch his or her back.
- Have a high-pitched cry.

A high bilirubin level can be dangerous. Make sure to call a doctor right away if your baby has any of these symptoms.

DIAGNOSED

Your baby's doctor will do a physical exam and ask you questions about your health and your baby's health. For example, the doctor might ask if you and your baby have different blood types.

The doctor may place a device against your baby's skin to check your baby's bilirubin level. A blood test for bilirubin may be done to find out if your baby needs treatment.

More tests may be needed if the doctor thinks that a health problem is causing too much bilirubin in the blood.

Can jaundice be dangerous?

In the vast majority of cases, jaundice isn't anything to worry about. But if a baby's bilirubin levels get too high, jaundice can cause permanent damage to the nervous system. A very small percentage of jaundiced newborns develop a condition called kernicterus, which can result in deafness, delayed development, or a form of cerebral palsy.

Dangerous levels of jaundice

Jaundice becomes dangerous when bilirubin levels exceed 20 to 25 milligrams per deciliter. High bilirubin levels, which indicate severe jaundice, can cause extreme sleepiness, seizures, muscle rigidity and intellectual disability.

Are some babies more prone to jaundice than others?

Yes, babies are more likely to have noticeable jaundice if they:

- has a sibling who had jaundice
- had bruises at birth (the red blood cells that are part of the bruises are broken down and produce bilirubin as a byproduct)
- were born prematurely, because their immature liver may not be able to handle the bilirubin levels

- have a certain genetic disorder (such as Gilbert's syndrome; inherited red blood cell membrane defects; or galactosemia, an inherited metabolic disorder)
- have a certain disease, such as cystic fibrosis or hypothyroidism

Jaundice during a baby's first 24 hours can also be caused by serious conditions such as liver, gallbladder, and intestinal disorders, an infection, excessive birth trauma, certain diseases, or extreme prematurity (birth before 28 weeks gestation). Rh-incompatibility and blood-type incompatibility can also cause jaundice in the first day.

TREATMENT

Your baby will need treatment if the bilirubin level is above the normal range for newborns. He or she will be put under a type of fluorescent light to treat the jaundice. This is called phototherapy. The skin absorbs the light, which changes the bilirubin so that the body can more easily get rid of it. The treatment is usually done in a hospital. But babies sometimes are treated at home.

Don't try to treat jaundice by placing your baby in the sun or near a window. Special lights and controlled surroundings are always needed to treat jaundice safely.

If a health problem caused the jaundice, your baby may need other treatment. For example, a baby with severe jaundice caused by Rh incompatibility may need a blood transfusion.

PREVENTIONS

If your baby has jaundice, you have an important role to play.

- Look closely at your baby's skin 2 times a day to make sure that the color is returning to normal. If your baby has dark skin, look at the white part of the eyes.
- Take your baby for any follow-up testing your doctor recommends.
- Call the doctor if the yellow color gets brighter after your baby is 3 days old.

The best thing you can do to reduce jaundice is to make sure that your baby gets enough to eat. That will help your baby's body get rid of the extra bilirubin.

- If you are breastfeeding, feed your baby about 8 to 12 times every 24 hours.
- If you are feeding your baby from a bottle, stay on your schedule (usually about 6 to 10 feedings every 24 hours).

CONCLUSION

Jaundice is easily diagnosable however require quick and on the spot treatment. If not treated properly, it leads to many complications. Currently the treatment options for jaundice include photo therapy, chemotherapy, vaccinations etc.

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