



The care of the neonatal jaundice

新生兒黃疸的照顧(英文)

Causes of neonatal jaundice

With neonates, benign jaundice tends to develop because of two factors - the breakdown of fetal hemoglobin as it is replaced with adult hemoglobin and the relatively immature hepatic metabolic pathways which are unable to conjugate and so excrete bilirubin as quickly as an adult. This causes an accumulation of bilirubin in the blood (hyperbilirubinemia), leading to the symptoms of jaundice.

What' s neonatal jaundice?

Most infants develop visible jaundice due to elevation of unconjugated bilirubin concentration during their first week. Neonatal jaundice is a yellowing of the skin and other tissues of a newborn infant. A bilirubin level of more than 5 mg/dL manifests clinical jaundice in neonates whereas in the adults 2 mg/dL would look icteric. In newborns jaundice is detected by blanching the skin with digital pressure so that it reveals underlying skin and subcutaneous tissue. In neonates the dermal icterus is first noted in the face and as the bilirubin level rises proceeds caudal to the trunk and then to the extremities.

Physiologic jaundice

Jaundice lasts for about 5 days with a rapid rise of serum bilirubin up to 12 mg/dL. Bilirubin levels decline about 2 mg/dL for 2 weeks, eventually mimicking adult values. Most infants develop visible jaundice due to elevation of unconjugated bilirubin concentration during their first week. This common condition is called physiological jaundice. This is popular in the neonatal group in Taiwan.

Pathological jaundice

Any of the following features characterizes pathological jaundice and if your baby has any of it, you should bring he or she to the hospital.

Hyperbilirubinemia in a high level may injury the brain cell and cause cerebral palsy.

1. Clinical jaundice appearing in the first 24 hours and greater than 10mg/dL.
2. Total bilirubin more than 15 mg/dL 48 hours after birth.
3. Presented with other signs as fever, diarrhea, or decreased activity.
4. Increases in the level of total bilirubin by more than 0.5 mg/dL per hour or 5 mg/dL per 24 hours.
5. Jaundice lasted for more than 3 weeks.

Management

1. Exposing infants to high levels of colored light or sunlight breaks down the bilirubin for management of physiological jaundice.
2. Closely monitor the skin color, feeding amount, and activity if any clay color stool appears.
3. Seek for the doctor's opinion if any abnormality was found.

Cautions for neonatal jaundice

1. newborn should be observed for jaundice in the first two weeks.
2. infants with rapid spread areas of the yellow skin should be sent to hospital for further survey.
3. adequate feeding amount is needed.
4. when the baby appears tired, decreased sucking power, sleepy, vomiting or fever, he or she should be sent to the doctor immediately.