SIGNS AND CAUSES OF NEONATAL JAUNDICE

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Introduction

The skin and eyes of a newborn may appear yellow at or shortly after birth due to jaundice, which is a common and usually harmless condition. It most often occurs in infants born before 38 weeks of gestation and in some breastfed babies. Typically, neonatal jaundice develops because the newborn's liver is not yet mature enough to efficiently eliminate bilirubin from the bloodstream.

Neonatal jaundice is one of the most frequently observed clinical conditions in the first days of life and is detected to varying degrees in approximately 60–70% of newborns. This condition is characterized by yellow discoloration of the skin, mucous membranes, and sclera of the eyes and is mainly associated with elevated bilirubin levels in the blood. Bilirubin is a pigment produced as a result of hemoglobin breakdown, and its elimination from the body depends directly on liver function. Due to the immaturity of hepatic enzyme systems in newborns, complete metabolism and excretion of bilirubin may be insufficient. In most cases, neonatal jaundice is physiological in nature and resolves spontaneously.

Results

According to the analysis results, neonatal jaundice is manifested by the following main signs: yellowing of the skin (initially affecting the face and neck, later spreading to the trunk and extremities), yellow discoloration of the sclera, drowsiness, weak sucking, decreased appetite, and in some cases increased irritability or, conversely, lethargy.

If excessive amounts of bilirubin—a substance released during the normal breakdown of red blood cells—accumulate in the blood, jaundice develops. It may resolve on its own, or a physician may recommend phototherapy or other treatment methods to facilitate bilirubin elimination. When the newborn's liver is insufficiently developed to clear bilirubin from the bloodstream, jaundice occurs. Under such normal neonatal conditions, this condition is referred to as physiological jaundice. It usually appears on the second or third day of life.

Neonatal jaundice may also occur as a result of underlying pathological conditions in some newborns. Normally, bilirubin is filtered from the blood and excreted into the intestines by the liver. However, the immature liver of a newborn is often unable to process bilirubin rapidly, leading to its accumulation. Physiological jaundice is a type of jaundice that appears on the second or third day of life.

Breastfeeding may also contribute to the development of jaundice in newborns. In breastfed infants, jaundice manifests in two forms. If the infant is not feeding adequately

or if breast milk production is delayed, breastfeeding jaundice develops during the first week of life.

Discussion

The analyzed data indicate that although neonatal jaundice is physiological in most cases, continuous monitoring is of great importance. This is because jaundice that appears mild externally may rapidly progress to a pathological form. The risk of complications is particularly higher in preterm and low-birth-weight infants.

Early detection and timely treatment of pathological jaundice play a crucial role in preventing bilirubin encephalopathy. Therefore, neonatologists and pediatricians are advised to regularly monitor bilirubin levels through laboratory testing. Educating mothers to observe changes in their infant's skin color is also an essential component of preventive care.

Conclusion

In conclusion, neonatal jaundice is a common condition; however, it should not be approached with indifference. Proper assessment, identification of underlying causes, and timely medical intervention when necessary are of great importance in ensuring the health of future generations.

REFERENCES

1. Kliegman R., St. Geme J. Nelson Textbook of Pediatrics. 21st Edition. Elsevier, 2020.
2. Maisels M.J., McDonagh A.F. Phototherapy for neonatal jaundice. New England Journal of Medicine, 2008.
3. World Health Organization (WHO). Guidelines on Neonatal Jaundice Management. Geneva, 2019.
4. American Academy of Pediatrics (AAP). Management of Hyperbilirubinemia in the Newborn Infant. Pediatrics, 2022.
5. Avery G.B., Fletcher M.A., MacDonald M.G. Neonatology: Pathophysiology and Management of the Newborn. Lippincott Williams & Wilkins, 2015.
6. Toshpulatov A.A. Fundamentals of Neonatology. Tashkent: Tib-kitob, 2018.
7. WHO & UNICEF. Guidelines for Newborn Health Care, 2020.