

Neonatal Bilirubin Status-Always A Priority

Objectives

- Review the revisions made by the American Academy of Pediatrics in 2022 to its neonatal hyperbilirubinemia clinical practice guidelines including adjustments to the nomograms for initiating phototherapy in newborns
- List conditions that increase the ability of bilirubin to cross the blood-brain barrier elevating the risk of neurotoxicity
- Outline the processes for diagnosing and treating hyperbilirubinemia including screening recommendations, ongoing monitoring, and discharge planning
- Describe the use of phototherapy, both inpatient and home therapy, and summarize the systematic review findings related to the efficacy of home phototherapy for physiological and non-physiological jaundice

Content Outline

1. Evaluating and Treating Hyperbilirubinemia
 - 1.1 Overview of physiologic and non-physiologic hyperbilirubinemia
 - 1.2 Risk factors and clinical signs related to bilirubin neurotoxicity
 - 1.2.1 Acute bilirubin encephalopathy
 - 1.2.2 Kernicterus
 - 1.3 Key clinical recommendations related to bilirubin assessment, diagnosis, and management in neonates
 - 1.3.1 Screening recommendations
 - 1.3.2 AAP nomograms to guide phototherapy initiation and use
 - 1.3.3 Breastfeeding guidelines
 - 1.4 Initiation of phototherapy
 - 1.4.1 Initial and ongoing laboratory testing
 - 1.5 Escalation of care in response to rising bilirubin levels
 - 1.6 Postdischarge follow-up recommendations
2. Systematic Review Findings Related to the Efficacy of Home Phototherapy
 - 2.1 Objectives and outline of review methods
 - 2.2 Results of individual studies
 - 2.3 Discussion of findings and conclusions
 - 2.4 Presentation of more recent study findings

Reading Material Resources

Module WB2575: Neonatal Bilirubin Status-Always A Priority is based on the resources listed below. A copy of each resource is included with the module.

Neonatal Hyperbilirubinemia: Evaluation and Treatment, Par EJ et al., *American Family Physician*, 107 (5), (2023), 525-534

The efficacy of home phototherapy for physiological and non-physiological neonatal jaundice: A systematic review, Anderson CM et al., *Journal of Neonatal Nursing*, 28 (2022), 312-326