

The Multifaceted Aspects of Neonatal Jaundice

Objectives

- Outline the neonatal transition from lipid-soluble unconjugated bilirubin metabolism in the fetal stage to the adult stage water-soluble conjugated bilirubin form
- Identify risk factors and clinical manifestations of neonatal jaundice and list the potential diagnoses and the laboratory testing indicated for evaluation of severe neonatal hyperbilirubinemia
- Contrast the physical findings and clinical course of physiologic versus pathologic hyperbilirubinemia and note the differences between the clinical entities of breastfeeding jaundice and breast milk jaundice
- Describe the etiology, incidence, clinical manifestations, and approaches to prevention of bilirubin encephalopathy (kernicterus)
- Discuss the neonatal hyperbilirubinemia treatment approaches presented including the use of phototherapy and exchange transfusion as well as the discharge plan and post discharge recommendations

Content Outline

1. Neonatal Jaundice and Hyperbilirubinemia
 - 1.1 Hyperbilirubinemia terminology and etiology
 - 1.2 Risk factors, clinical manifestations, and diagnostic approaches related to evaluation of neonatal jaundice, both physiologic and pathologic
 - 1.3 Distinguish breastfeeding jaundice from breast milk jaundice
 - 1.4 Incidence, prognosis, clinical manifestations, preventive measures, and use of hour-specific bilirubin nomograms to avoid bilirubin encephalopathy
 - 1.5 Treatment approaches or addressing indirect-reacting bilirubin including escalation of care approach for exchange transfusion need
 - 1.6 Role of intravenous immunoglobulin
 - 1.7 Risk factors and indications for the use of double volume exchange transfusion
 - 1.7.1 Description of ideal blood products to be used
 - 1.7.2 Potential complications of the procedure

Reading Material Resources

Module WB2748: The Multifaceted Aspects of Neonatal Jaundice is based on the resource listed below. A copy of the resource is included with the module.

Chapter 137 Jaundice and Hyperbilirubinemia in the Newborn, Ryan KS and Kliegman RM in *Nelson Textbook of Pediatrics, Twenty-Second Edition*, Elsevier, 2025, 1106-1116.e1