Neonates at Risk

Objectives

- Contrast the risk factors and physical characteristics of preterm, term and post term neonates and include those aspects of care impacted by variations in sizing by gestational age (SGA, LGA).
- Identify the pathophysiology, risk factors, presenting signs and suggested clinical management for common neonatal conditions such as respiratory distress syndrome (RDS), transient tachypnea of the newborn (TTN), meconium aspiration syndrome (MAS), & persistent pulmonary hypertension of the newborn (PPHN).
- Outline the physiologic processes associated with the metabolism of bilirubin and describe the pathophysiology related to disorders of hyperbilirubinemia including the maternal and neonatal risk factors and approaches to clinical management.
- Discuss the various factors that give rise to a selection of common congenital anomalies in the newborn and include approaches to assessment, diagnosis and management of such disorders.

Content Outline

1. Variations in Gestational Age and Sizing with the Related Pathophysiology and Clinical Approaches to Assessment and Management
   1.1 Small for gestational age (SGA)/intrauterine growth restriction (IUGR)
   1.2 Large for gestational age (LGA)
   1.3 Preterm infant
      1.3.1 Late preterm
   1.4 Post term infant

2. Respiratory Disorders of the Neonatal Period
   2.1 Overview of causes of respiratory distress in the neonate
   2.2 Respiratory distress syndrome (RDS)
   2.3 Transient tachpnea of the newborn (TTN)
   2.4 Meconium aspiration syndrome (MAS)
   2.5 Persistent pulmonary hypertension of the newborn (PPHN)

3. Hyperbilirubinemia
   3.1 Physiologic jaundice
      3.1.1 Process of bilirubin metabolism
   3.2 Pathologic jaundice
      3.2.1 Kernicterus
   3.3 Assessment and management interventions
      3.3.1 Phototherapy
      3.3.2 Use of nomogram

4. Congenital Anomalies Commonly Seen in the Neonatal Period Including Assessment, Diagnosis and Clinical Management
   4.1 Neural tube defects
   4.2 Gastrointestinal tract anomalies
   4.3 Congenital cardiac malformations
      4.3.1 Acyanotic
      4.3.2 Cyanotic

Reading Material Resources

This self assessment module is based on the resources listed below.

The reading materials are accessed from the NCC portal to MD Consult publisher site.

Core Curriculum for Maternal Newborn Nursing, Mattson, Saunders Elsevier, 2011, Chapter 17 The Infant at Risk, pages 382-413.