Common Newborn Hematologic Disorders

Objectives

- Outline the underlying causes of hemolytic disease in the newborn including the screening and diagnostic approaches used in the prenatal and early newborn period to identify at-risk infants.
- Describe the underlying causes and early clinical findings of anemia, polycythemia and thrombocytopenia as these disorders present in the newborn period.
- Summarize the approaches used to identify, monitor and manage the newborn with conjugated and unconjugated forms of jaundice in order to avoid the risk of bilirubin neurotoxicity.

Content Outline

1. Hematologic Problems in the Newborn
   1.1 Hemolytic disease of the newborn
      1.1.1 Immune-mediated
      1.1.2 RBC enzyme defects
      1.1.3 RBC membrane defects
      1.1.4 Hemoglobinopathies
   1.2 Maternal screening & prenatal Interventions
   1.3 Diagnosis of hemolysis & risk of neurotoxicity
   1.4 Anemia
   1.5 Polycythemia
   1.6 Thrombocytopenia

2. Management of Neonatal Jaundice
   2.1 Identification of at-risk newborn infants
   2.2 Assessing bilirubin levels
      2.2.1 Transcutaneous bilirubinometry
      2.2.2 Blood sampling
   2.3 Diagnostic approaches
      2.3.1 Causes of unconjugated jaundice
      2.3.2 Causes of conjugated jaundice
      2.3.3 Prolonged jaundice
   2.4 Clinical management
      2.4.1 Phototherapy
      2.4.2 Pharmacology
      2.4.3 Exchange transfusion
   2.5 United Kingdom guidelines for management of jaundice in term & preterm infants

Reading Material Resources

Module WB1725: Common Newborn Hematologic Disorders is based on the resources listed below. A copy of the resources are included with the module.
