

# Neonatal jaundice

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#### Rationale

Jaundice, usually mild unconjugated bilirubinemia, affects many newborns. Although most cases are physiological, some are indicative of serious underlying disorders.

### **Causal Conditions**

(list not exhaustive)

- · Unconjugated hyperbilirubinemia
  - a. Increased bilirubin production
    - 1. Hemolytic causes (e.g., Coombs positive, Coombs negative)
  - b. Decreased bilirubin conjugation
    - Metabolic or genetic (e.g., Gilbert syndrome, hypothyroidism)
    - Physiologic (e.g., breast milk jaundice)
  - c. Gastrointestinal (e.g., sequestered blood)
- Conjugated hyperbilirubinemia
  - a. Decreased bilirubin uptake
    - Infections (e.g., sepsis, neonatal hepatitis)
    - Cholestasis (e.g., total parenteral nutrition)
    - Metabolic
    - Genetic
  - b. Obstructive (e.g., biliary atresia)

## **Key Objectives**

Given a patient with neonatal jaundice, the candidate will diagnose the cause, severity, and complications, and will initiate an appropriate management plan. Particular attention should be paid to jaundice which presents within the first three days after birth or with a rapid onset.

### **Enabling Objectives**

Given a patient with neonatal jaundice, the candidate will

- · list and interpret critical clinical findings, including
  - a. determining whether the neonate meets the criteria for treatment of physiologic jaundice;
  - b. identifying features of serious underlying disorders;
- list and interpret critical investigations, including
  - a. those investigations which differentiate disorders associated with conjugated or unconjugated hyperbilirubinemia;
- construct an effective initial management plan, including
  - a. monitoring and managing physiologic jaundice;
  - b. referring the patient to appropriate specialists in the case of non-physiologic jaundice;
  - c. counselling and reassuring parents, as appropriate.