



- **History: Questions which you must cover include the following:**
 - Onset of jaundice.
 - Rule-out the presence of sepsis by asking about: activity, feeding, fever and rash.
 - ABO, Rh and any other hemolytic diseases (G6PD, thalassemia, hereditary spherocytosis... etc).
 - Breastfeeding.
 - Color of urine and stool (to rule-out direct hyperbilirubinemia).
 - Ask about jaundice in siblings to rule-out familial causes of jaundice.
 - If there is prolonged jaundice (> 2 weeks), ask about bowel motion because hypothyroidism causes constipation.
- **Physical examination:**
 - **Vital signs and growth chart.**
 - **General inspection:**
 - ✓ Press the skin against a bony prominence (forehead, nose, sternum and shin) to detect the yellowish discoloration associated with jaundice. Notice that jaundice starts from head and then descending to toes (according to severity).
 - ✓ Check for pallor, state of dehydration, rash (which can be phototherapy rash or erythema toxicum neonatorum), other skin lesions or discoloration and any dysmorphic features.
 - **Specific examinations:**
 - ✓ Abdominal examination:
 - ❖ *Inspection:* don't forget to comment on the umbilicus because this is a neonate.
 - ❖ *Superficial palpation.*
 - ❖ *Deep palpation:* it is normal to feel the liver (2 cm below the costal margin). Normally, spleen is not palpable.
 - ✓ Head examination:
 - ❖ To check for the presence of cephalohematoma and differentiate it from caput.
 - ❖ Don't forget to check the anterior fontanel and see if it is bulging or depressed.
 - ✓ CNS examination:
 - ❖ Tone.
 - ❖ *Reflexes:* the most important being Moro reflex (extension-abduction then flexion-adduction followed by crying).
 - ✓ Chest and heart examination:
 - ❖ To rule-out the presence of any murmurs (because some syndromes can cause murmurs and jaundice).
- **Investigations:**
 - **CBC:**
 - ✓ Hb and Hct (if there is polycythemia, partial exchange transfusion will be done). In polycythemia, there is increased RBC mass which results in increased hemolysis that leads to jaundice.
 - ✓ Reticulocytes: to check for hemolysis.
 - ✓ WBCs: to rule out sepsis or infection.
 - **G6PD activity.**
 - **Hb electrophoresis.**
 - **Coomb's test, Rh and ABO**
 - **Bilirubin (total, direct and indirect).**
 - **Urinalysis and urine culture to rule-out the presence of UTI.**
 - **TSH: to check for hypothyroidism.**