

SAQ 4

A mother has brought her 6 day old baby to your Emergency Department, she is concerned that her child has become increasingly jaundiced.

a. What percentage of term and pre-term babies develop jaundice in the first week of life? (2 Marks)

1 Mark each for:

- Term = 60%
- Pre-term = 80%

b. List 4 causes of neonatal unconjugated hyperbilirubinaemia (4 Marks)

- Physiological
- Breast milk jaundice
- Sepsis

- Haemolysis due to blood group incompatibility
- Non-haemolytic red cell destruction e.g. polycythaemia, bruising, cephalhaematoma)
- GIT Obstruction
- Prematurity
- Hypothyroidism

c. List 2 causes of neonatal conjugated hyperbilirubinaemia (2 Marks)

- Biliary Atresia
- Choledochal cyst
- Neonatal hepatitis
 - Idiopathic
 - TORCH infection - toxoplasmosis, CMV, rubella, herpes, syphilis
- Metabolic disorder inc. galactosaemia, fructose intolerance
- Post TPN

d. List two factors associated with an increased risk of developing kernicterus (2 Marks)

- Severe hyperbilirubinaemia (>340 micromol/litre in term baby)
- Rapidly rising bilirubin level (> 8.5 micromol/litre/hour)
- Clinical features of acute bilirubin encephalopathy

Answers adapted from DoH Victoria Neonatal eHandbook

(<http://www.health.vic.gov.au/neonatalhandbook/conditions/jaundice-in-neonates.htm>) RCH Melbourne Clinical Guideline

(http://www.rch.org.au/clinicalguide/guideline_index/Jaundice_in_Early_Infancy/) and NICE Guideline CG98 Neonatal Jaundice (<https://www.nice.org.uk/guidance/cg98>)