

Neonatal Surgical Jaundice

Physiological jaundice occurs in first week of life and is very common

When is it pathological jaundice?

Presents on day 1 of life

Prolonged neonatal jaundice (Lasts after 14 days of life)

Presence of jaundice and pale stools

Differential diagnosis conjugated or direct hyperbilirubinemia

Infections (TORCHES)

Septicaemia

Hepatitis B&C

HIV/ TB infection

TPN cholestasis

Rare causes

Anatomic: Biliary atresia; choledochal cyst; intrahepatic bile duct hypoplasia; hepatic infarction

Metabolic: Galactosaemia; cystic fibrosis

Other: Alagille syndrome

Timely intervention is critical in the outcome of surgical causes of obstructive jaundice. Prolonged NNJ needs meticulous investigation to get to a diagnosis. White stool and dark urine suggest conjugated hyperbilirubinaemia.

Tests to be done: TORCHES + screen for infective causes

Metabolic screen

Sonar of liver and biliary tree(fasting, to look for gall bladder)

Liver function tests: raise GGT typical in biliary atresia

Biliary atresia

Aetiology unknown. Atresia can be extra- and/or intrahepatic

GGT levels >1000 to diagnose Biliary atresia in presence of obstructive jaundice.

Confirm diagnosis with an ultrasound, baby must be fasting for 3hrs so that if gallbladder present it will be distended. Absence of gallbladder is highly suggestive of biliary atresia, refer the baby immediately to a tertiary hospital.

Surgical treatment: Kasai portoenterostomy. Must be done before age of 3 months. Long term success: 30-50%

If Kasai procedure fails: liver transplant

Choledochal cyst

Second most common cause of surgical NNJ

Present with abdominal mass / abdominal pain

Confirm diagnosis with ultrasound

Treatment: Cholecystectomy, cyst excision and hepatico-jejunostomy

Excellent prognosis

Obstructive jaundice in later childhood

(Not as common as in adults)

Cholelithiasis: Haemolytic disease or cholesterol stones (most common cause)

Liver abscess

Ascariidiosis

Liver or pancreatic tumours very rare in this age group.

Traumatic: haemabilia