Classification of jaundice according to type of bile pigment and mechanism

**Unconjugated hyperbilirubinemia**

Increased bilirubin production\*

Extravascular hemolysis

Extravasation of blood into tissues

Intravascular hemolysis

Dyserythropoiesis

**Impaired hepatic bilirubin uptake**

Heart failure

Portosystemic shunts

Some patients with Gilbert's syndrome

Certain drugs• - rifampin, probenecid flavaspadic acid, bunamiodyl

**Impaired bilirubin conjugation**

Crigler-Najjar syndrome type I and II

Gilbert's syndrome

Neonates

Hyperthyroidism

Ethinyl estradiol

Liver diseases - chronic persistent hepatitis, advanced cirrhosis, Wilson's disease

 **Conjugated hyperbilirubinemia**

Extrahepatic cholestasis (biliary obstruction)

Choledocholithiasis

Intrinsic and extrinsic tumors - eg, cholangiocarcinoma

Primary sclerosing cholangitis

AIDS cholangiopathy

Acute and chronic pancreatitis

Strictures after invasive procedures

Certain parasitic infections - eg, Ascaris lumbricoides, liver flukes

**Intrahepatic cholestasis**

Viral hepatitis

Alcoholic hepatitisΔ

Nonalcoholic steatohepatitis

Primary biliary cirrhosis

Drugs and toxins - eg, alkylated steroids, chlorpromazine, herbal medications (eg, Jamaican bush tea), arsenic

**Sepsis and hypoperfusion states**

Infiltrative diseases - eg, amyloidosis, lymphoma, sarcoidosis, tuberculosis

Total parenteral nutrition

Postoperative patient

Following organ transplantation

Hepatic crisis in sickle cell disease

Pregnancy

End-stage liver disease

Hepatocellular injury

\* Serum bilirubin concentration usually less than 4 mg/dL (68 mmol/L) in the absence of underlying liver disease.

• The hyperbilirubinemia induced by drugs usually resolves within 48 hours after the drug is discontinued.

Δ Serum AST:ALT greater than 2.0 with both values being below 500 IU/L.