# Liver disease

## 1 The liver:
- Weighs about 2kg
- Receives 80% of its blood from the hepatic artery
- Plays a role in the regulation of blood sugar
- Synthesises clotting factors
- Contains one third of the body's macrophages

## 2 Regarding the causes of liver disease:
- Hepatitis A is a common cause of chronic liver disease
- Generally, patients with pre-existing liver disease are at increased risk of drug-induced hepatotoxicity
- About 85% of patients exposed to the hepatitis C virus will develop chronic liver disease
- Primary biliary cirrhosis is caused by an accumulation of copper in the body
- Biliary atresia is the most common reason for liver transplant in children

## 3 Symptoms of liver disease include:
- Jaundice
- Dark stools
- Itch
- Palmar erythema
- Increased appetite

## 4 Hepatic encephalopathy:
- Symptoms include confusion and asterixis
- Is thought to be caused by the failure of the liver to remove gut-derived toxins such as ammonia
- Is usually treated with lactulose, but there is limited evidence for its preferential use over other laxatives
- Is never treated with antibiotics
- Is the most common complication of liver cirrhosis

## 5 Concerning ascites in liver disease:
- It is caused by the inability to excrete adequate amounts of sodium and water into the urine
- Treatment includes restriction of dietary sodium
- Spironolactone treatment is often limited by hypokalaemia
- Spironolactone should not be used in combination with a loop diuretic
- Usually, the starting dose spironolactone is 100mg per day

## 6 The Child-Pugh score is calculated using the following variables:
- Gamma glutamyltransferase
- Albumin
- International normalised ratio
- Ascites
- Aspartate transaminase

## 7 Portal hypertension:
- Occurs when there is increased pressure within the hepatic portal artery
- Is managed with selective beta-blockers such as atenolol
- Can lead to formation of collateral vessels that enable blood to bypass the liver
- Can be treated by creating a shunt between the portal vein and the hepatic venous system, known as a TIPS procedure
- Can cause splenomegaly

## 8 Regarding the complications of chronic liver disease:
- Antihistamines are the first-line treatment for pruritis
- Variceal bleeding is one of the leading causes of death in patients with liver cirrhosis
- Hepatorenal syndrome can be precipitated by spontaneous bacterial peritonitis
- Spontaneous bacterial peritonitis is most commonly caused by Gram-positive bacteria
- Patients with deranged blood clotting should be given intravenous vitamin K

## 9 Alcohol:
- Consumption is often underreported by patients
- Is converted to acetate by alcohol dehydrogenase
- Guidelines in the UK recommend that men drink no more than four to five units per day
- Withdrawal can cause tremor, sweating and hallucinations
- Withdrawal is usually treated with benzodiazepines

## 10 Concerning alcoholic liver disease:
- Abstinence is the cornerstone of treatment
- Wernicke's encephalopathy is irreversible
- It has three stages — steatosis, alcoholic hepatitis and cirrhosis
- Alcoholic hepatitis can be treated with corticosteroids
- Liver ultrasound has no role in its diagnosis