FELLOWSHIP SAQs Liver - answers

1.
A 55 year old man with a history of recent binge drinking alcohol presents with severe epigastric pain.

a) List five common causes of pancreatitis.
Alcohol, Gallstones, Post ERCP, Idiopathic, Type II diabetes, Hyperlipidaemia, Penetrating peptic ulcer, Hypercalcaemia, Drugs, Vasculitis, Mumps

b) List 3 features of lipase in diagnosis of pancreatitis
Rise 4-8 hours post onset of pain, peaks at 24 hours, normal by 1-2 weeks
Approaches 100% specificity with levels >3x normal
Degree of elevation does not correlate with severity

c) List 3 features on CT abdomen in acute pancreatitis
Enlarged pancreas
Peripancreatic fluid
Peripancreatic fat stranding

d) List five indicators of severe pancreatitis that may be present on arrival in ED.
Age >55 years
WCC >16 x 10^6/L
Glucose >10 mmol/L
LDH > 350 IU/L
AST > 250 IU/L

e) What are five features of management of acute pancreatitis.
Circulatory support - IV fluids, ionotropes
Ventilatory support – may develop ARDs
Analgesia
Bowel rest and Nutritional support
Address the cause – stop harmful alcohol, ERCP, cholecystectomy

f) List four acute complications of pancreatitis.
Hypovolaemia
ARDs
Infections
Ileus
Pseudo cysts occur >4 weeks

2.

A 42 year old woman presents with RUQ pain. On examination, she is febrile 39 degrees and has RUQ tenderness and guarding. She has a WCC 18 x 10^7.
You suspect she has cholecystitis

a) List four ultrasound findings that would confirm your diagnosis.

Gallbladder wall >4mm thickness
Gallstones
Pericholic fluid
Gas in gall bladder wall or biliary tree in acalculus/gangrene
Sonographic positive Murphy's sign

b) List four indications for urgent surgery.

Gall bladder perforation
Gallstone ileus
Empyema of gall bladder
Acalculus cholecystitis

c) List four potential complications of cholecystitis.

Perforation
Empyema formation
Subphrenic abscess
Gallstone ileus

3.
A 48 year old man presents with abdominal distension, abdominal discomfort and jaundice. He has a background of harmful alcohol consumption and intravenous drug use.

a) List eight causes of chronic liver disease.

Alcohol
Infectious hepatitis – HBV, HCV
Diabetes
Chronic heart failure
Autoimmune – PBC, sclerosing cholangitis
Drugs – tend to cause acute hepatic damage eg paracetamol
Depositions – haemachromatosis, Wilsons, glycogen storage diseases
Alpha 1 anti-trypsin deficiency

b) List eight clinical features of chronic liver disease.

Hands, forearms, lower limbs	*Dupuytren's contracture* *Palmar erythema* *Clubbing* *Easy bruising/bleeding* *Scratch marks* *Peripheral oedema* *Metabolic flap* *Muscle-wasting (if severe)*
Head and neck	*Jaundice* *Parotid enlargement* *Xanthomata* *Encephalopathy*
Chest	*Gynaecomastia* *Spider naevi*
Abdomen	*Dilated superficial veins* *Ascites* *Umbilical hernia* *Splenomegaly* *Hepatomegaly* *Testicular atrophy*

c) What three clinical findings demonstrate portal hypertension?

Ascites
Splenomegaly
Caput medusae
Anorectal varices

d) List eight biochemical abnormalities you expect to find in chronic liver disease.

Elevated bilirubin
Elevated aminotransferases AST>ALT in cirrhosis and alcohol related liver disease
Elevated serum alkaline phosphatase but not more than 2-3 times normal
Elevated GGT – especially with liver disease from alcohol
Reduced serum albumin
Elevated Ferritin – >1000microg/L suggests haemachromatosis
Elevated LDH
Elevated ammonia level with encephalopathy
Hyponatraemia (from elevated ADH secretion)
Low magnesium
Low phosphate
Thrombocytopaenia
Increased prothrombin time

e) List four indications for paracentesis.

Evaluation of new ascites
Testing pre existing ascites for bacterial infection
Relieving tense ascites for patient comfort
Large ascites in acute renal failure
Large ascites in respiratory failure