Multiple-choice questions

Multiple-choice questions in gastro-enterology and hepatology

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Are the statements listed beneath each question true or false? Answers are given overleaf.

QUESTION 1

A 48-year-old alcoholic with hepatic cachexia reports abstaining for a year. After effective banding of bleeding oesophageal varices he then develops refractory ascites:

- A If his history of stopping drinking is confirmed, a liver transplant is his best chance
- B Terlipressin therapy is useful
- C Maintenance treatment with diuretics will need to stop if hyponatraemia develops
- D Portacaval shunting is life prolonging
- E Transjugular intrahepatic portasystemic shunting (TIPSS) is the best treatment for the ascites

QUESTION 2

Factors of importance in predicting the virulence of *Helicobacter pylori* are:

- A cagA protein
- B jamA protein
- C vacA protein
- D Metronidazole resistance
- E Coccoid morphology

QUESTION 3

Which of the following are true of hepatitis C infection?:

- A Hepatitis C virus is a DNA virus
- B Infection is a risk factor for hepatocellular carcinoma
- C Infection is commoner in women
- D Commonly transmitted by sexual contact
- E Alpha-interferon is an effective treatment to cure the infection

QUESTION 4

When patients with chronic liver disease presents with ascites which of the following are true?:

- A Diagnostic paracentesis should always be done at presentation and at any recurrence
- B Therapeutic paracentesis is a safe and effective therapy
- C When using diuretics, a vigorous diuretic response of more than 1 litre negative balance daily should be the aim
- D Variceal haemorrhage is more common
- E A neutrophil count of more than 25/ml indicates peritonitis

QUESTION 5

Which of the following conditions raises the possibility of small intestinal colonisation in a patient with diarrhoea?:

- A Duodenal ulcer disease
- B Scleroderma
- C Tropical sprue
- D Intestinal diverticulosis
- E Pernicious anaemia

QUESTION 6

A serum cholesterol of 10 mmol/l should not be treated with statins in:

- A A woman of 85 years
- B Alcoholism
- C Primary biliary cirrhosis
- D Patients of South Asian extraction
- E Carcinomatosis

QUESTION 7

Gallstones are proved to be associated with:

- A Female sex
- B Pregnancy
- C Oral contraceptives
- D Ageing
- E Hormone replacement therapy

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Answers**QUESTION 1**

- A True
- B False
- C False
- D False
- E False

Terlipressin is intravenous therapy only useful for acute variceal bleeding. Hyponatraemia is usual and well tolerated in these patients. Though portasystemic shunting cures variceal bleeding, the mode of death merely changes to hepatic encephalopathy with a similar life expectancy. TIPSS has a high complication rate in ascites and should be reserved for treatment of varices unresponsive to injection therapy and banding.

QUESTION 2

- A True
- B False
- C True
- D False
- E False

Both *cagA* and *vacA* proteins have been identified as markers of pathogenicity. Coccoid forms are probably dormant bacilli; they are found after proton pump inhibitor therapy. Apparent metronidazole insensitivity is a contentious issue of no certain relevance to modern therapy: in any case it does not predict virulence.

QUESTION 3

- A False
- B True
- C False
- D False
- E False

Hepatitis C is an RNA virus and is a major risk factor for hepatocellular carcinoma. The major mode of transmission is by contaminated blood – before 1991 by blood transfusion, now most commonly by shared needles in drug addicts. Sexual transmission is uncommon. Although alpha-interferon in currently recommended regimes will improve liver function tests in the short term in over 50% of patients, viral clearance is achieved in only 25% of patients.

QUESTION 4

- A True
- B True
- C False
- D True
- E False

Diagnostic paracentesis should be done to exclude complications and other causes. Primary peritonitis is a common complication in these patients and may have few or no physical signs. The development of hepatic malignancy may present as ascites. The peritoneum can

only transport a maximum of 700 ml of fluid daily. In the absence of significant accompanying peripheral oedema, and rapid diuresis, with weight loss of more than 0.5 kg/day, will lead to uraemia and electrolyte disturbance. A neutrophil count of more than 500/ml indicates infection, and >250/ml is very suggestive thereof.

QUESTION 5

- A False
- B True
- C False
- D True
- E True

Bacterial colonisation occurs predominantly in disorders where there is persistent intestinal stasis. The gastrointestinal tract also is more likely to become colonised if the barrier provided by gastric acid is diminished, as in pernicious anaemia or treatment with proton pump inhibitors, or if mucosal immunity is impaired.

QUESTION 6

- A True
- B True
- C True
- D False
- E True

In extreme old age total serum cholesterol positively predicts longevity. In primary biliary cirrhosis there is abnormal lipoprotein metabolism, and the elevated serum cholesterol is not a risk factor for ischaemic heart disease: in any case the drugs used may adversely affect liver function. Patients with carcinomatosis have more important problems in life than theoretical protection from ischaemic heart disease. Alcoholics are very unlikely to comply properly with therapy and may in any case have mixed hyperlipidaemia related to elevated very low density lipoprotein rather than low density lipoprotein. The first measure in management is abstinence. By contrast, patients of South Asian extraction are particularly prone to ischaemic heart disease and are a very suitable target for lipid-lowering treatment.

QUESTION 7

- A True
- B True
- C False
- D True
- E False

Advancing age is the most important factor, but gallstones are commoner in women than men at all ages. Modern oral contraceptives definitely do not cause gallstones. The possibility that hormone replacement therapy using higher dose oestrogen causes cholelithiasis has been raised but this is not yet clear.