CME Gastroenterology (113045): self-assessment questionnaire

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SAQs and answers are ONLINE for RCP fellows and collegiate members

Format
Candidates are asked to choose the best answer from the five possible answers. This best of five format is used in many medical examinations; however, the questions are not intended to be representative of those used in the MRCP(UK) Part 1 or Part 2 Written Examinations.

The answering process
1. Go to www.rcplondon.ac.uk/SAQ
2. Log on using your usual RCP username and password
3. Select the relevant CME question paper
4. Answer all 10 questions by selecting the best answer from the options provided
5. Once you have answered all the questions, click on Submit

Registering your external CPD credits
Carrying out this activity allows you to claim two external CPD credits. These will be automatically transferred to your CPD diary, where you can review the activity and claim your points.

1. A 37-year-old woman was found to have a haemoglobin of 108 g/L on a blood test to investigate tiredness. Her ferritin was 11 μg/L (20–200 μg/L), MCV 79 fL (83–89 fL). She does not have any diarrhoea or abdominal pain, nor any symptoms of reflux or dysphagia. She had family history of colon cancer (her uncle aged 73).

What is the most appropriate investigation?
(a) coeliac serology
(b) colonoscopy only
(c) no investigations are required
(d) upper gastrointestinal endoscopy only
(e) upper gastrointestinal endoscopy plus colonoscopy.

2. A 72-year-old man was reviewed following blood test as part of his routine diabetes check. Looking back, his haemoglobin has been 92–98 g/L in the last 3 years.

Investigations showed:
Haemoglobin 98 g/L (NR 130–160 g/L)
MCV 80 fL (NR 83–89 fL)

<table>
<thead>
<tr>
<th>Ferritin</th>
<th>464 μg/L (NR 20–200 μg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transferrin sats</td>
<td>11% (NR 12–50%)</td>
</tr>
<tr>
<td>Transferrin</td>
<td>1.2 g/L (NR 1.7–3.5 g/L)</td>
</tr>
<tr>
<td>Coeliac screen</td>
<td>negative</td>
</tr>
<tr>
<td>Creatinine</td>
<td>47 μmol/L (60–110)</td>
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What is the most likely diagnosis?
(a) anaemia of chronic disease
(b) haemolysis
(c) hypothyroidism
(d) iron deficiency anaemia
(e) iron overload.

3. A 68-year-old man was found to have an iron deficiency anaemia on investigations for tiredness with a Hb of 102 g/L and a ferritin of 7. He has an urgent gastroscopy, colonoscopy and a coeliac screen and all were negative. He is started on iron supplements and the repeat Hb after 4 months of iron therapy was 89 g/L, with an MCV of 72 fL, urinalysis was negative for blood and protein.

What would be most appropriate next step in management?
(a) capsule endoscopy
(b) CT scan of the abdomen and pelvis
(c) faecal occult blood test
(d) haemolysis screen
(e) 3 further months of iron supplementation and repeat Hb.

4. A 52-year-old man with type 2 diabetes and BMI 30 recently had some blood tests and an abdominal ultrasound scan for abdominal pain. His symptoms resolved spontaneously but the results were as follows:

<table>
<thead>
<tr>
<th>Alanine aminotransferase</th>
<th>35 (5–38 IU/L)</th>
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<tbody>
<tr>
<td>Aspartate aminotransferase</td>
<td>28 (8–40 IU/L)</td>
</tr>
<tr>
<td>Alkaline phosphatase</td>
<td>90 (30–200 IU/L)</td>
</tr>
<tr>
<td>Gamma glutamyl transferase</td>
<td>60 (11–50 IU/L)</td>
</tr>
<tr>
<td>Albumin</td>
<td>33 (35–50 g/L)</td>
</tr>
<tr>
<td>Bilirubin</td>
<td>10 (3–17 μmol/L)</td>
</tr>
<tr>
<td>Platelets</td>
<td>135 (140–400x10^9/L)</td>
</tr>
</tbody>
</table>

Ultrasound showed a hyperechogenic liver in keeping with fatty infiltration.

Which of the following statements is most accurate?
(a) About 20% of patients with NAFLD will die from the complications of liver disease.
(b) Liver stiffness of 9 kPa on transient elastography confirms significant fibrosis.
(c) NASH is a rapidly progressive disease.
(d) NASH with fibrosis is unlikely because of the normal liver transaminases.
(e) Metabolic comorbidities are more reliable in identifying patients with NAFLD than liver function tests.

5. A patient with obesity and non-alcoholic steatohepatitis (NASH) was referred to hepatology services for further investigation.

Which one of the following statements regarding non-invasive markers is correct?

(a) Abdominal ultrasound can detect at least 5% steatosis.
(b) Non-invasive markers perform better at ‘ruling in’ rather than ‘ruling out’ fibrosis.
(c) There is no reliable non-invasive test for NASH.
(d) Transient elastography identifies early fibrosis more reliably than advanced fibrosis.
(e) Obeticholic acid is the most sensitive marker of NASH.

6. A patient with non-alcoholic steatohepatitis (NASH) and bridging fibrosis on liver biopsy (NASH CRN Score 5/8, fibrosis F3) came for review in clinic. He had lost 10 kg in weight since last seen 1 year ago.

Investigations showed:
- Alanine aminotransferase: 55 (5–38 IU/L)
- Aspartate aminotransferase: 40 (8–60 IU/L)
- Alkaline phosphatase: 85 (30–200 IU/L)
- Albumin: 37 (35–50 g/L)
- Platelets: 205 (140–400 x 10^9/L)

He has some questions about the current condition of his liver.

Which one of the following is most accurate?

(a) Liver fibrosis is irreversible.
(b) 50% of patients with 10% weight loss show improvement in NASH.
(c) 50% of patients with 10% weight loss show improvement in fibrosis stage.
(d) Liver fat reduction begins with 2% weight loss.
(e) In a trial on weight loss in NASH, 65% achieved at least 10% weight loss.

7. A 77-year-old man was admitted from a nursing home with diarrhoea following a course of co-amoxiclav used to treat a urinary infection.

Which one of the following is most consistent with a case of severe Clostridium difficile infection?

(a) Neutrophil count of 16 x 10^3/L (1.5–7.0)
(b) Platelet count of 548 x 10^9/L (150–450)
(c) Serum alanine aminotransferase of 74 U/L (5–35)
(d) Serum potassium of 2.8 mmol/L (3.5–4.9)
(e) Temperature of 37.9°C.

8. A 68-year-old woman was reviewed in hospital with recurrent Clostridium difficile infection requiring antibiotic therapy. She had previously had oral metronidazole, vancomycin and tapering of her therapy but developed further diarrhoea.

What is the most appropriate antibiotic choice?

(a) Amikacin
(b) Cefalexin
(c) Clindamycin
(d) Fidaxomicin
(e) Levofloxacin.

9. A 65-year-old woman developed diarrhoea and was diagnosed with Clostridium difficile infection (CDI). Her other medical history included gastro-oesophageal reflux disease and coronary artery disease.

Which of her current medications makes her most vulnerable to developing CDI?

(a) Amlodipine
(b) Aspirin
(c) Omeprazole
(d) Ramipril
(e) Ranitidine.

10. A 74-year-old woman was diagnosed with a first episode of Clostridium difficile infection (CDI). She was treated with vancomycin for 10 days and her diarrhoea completely resolved. At the end of her antibiotic course, a repeat stool assay was performed:

Clostridium difficile toxin B PCR: positive

What treatment should she receive?

(a) Faecal microbiota transplant
(b) Fidaxomicin
(c) Metronidazole
(d) No treatment
(e) Vancomycin taper.