



Clinical challenge

Questions for this month's clinical challenge are based on theme articles in this issue. The style and scope of questions is in keeping with the MCQ of the College Fellowship exam. The quiz is endorsed by the RACGP Quality Assurance and Continuing Professional Development Program and has been allocated 4 CPD points per issue. Answers to this clinical challenge will be published next month.

Jenni Parsons

SINGLE COMPLETION ITEMS

DIRECTIONS

Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the most appropriate statement as your answer.

Case 1 - Cathy Clough

Cathy Clough, aged 41 years, presents with a six month history of feeling tired. She has three children and works full time. She has heavy periods, worsening over the past 12 months and wonders whether this may be the cause.

Question 1

As part of the assessment you order FBE and ferritin levels. Which FBE result is most consistent with iron deficiency?

- A. Hb 99 g/L and MCV 85 fL
- B. Hb 95 g/L and MCV 105 fL
- C. Hb 110 g/L and MCV 90 f/L
- D. Hb 91 g/L and MCV 78 f/L
- E. None of the above.

Question 2

Cathy has a microcytic anaemia. Her ferritin level is 29 μ g/L. Choose the most correct response.

- A. this ferritin result excludes iron deficiency as it is the normal range
- B. full iron studies are required
- C. her post-test probability of having iron deficiency is less than 30%
- D. her post-test probability of having iron deficiency is greater than 30%
- E. the probability of iron deficiency in any patient with a microcytic anaemia is 60%.

Question 3

You tell Cathy that you think her anaemia is likely to be the cause of her fatigue and discuss appropriate management. Cathy says she is relieved that a cause has been found, as she had been worried it was 'all just stress and not coping'. You:

- A. reassure Cathy that iron replacement will get rid of her symptoms
- B. explore with Cathy what her concerns are about 'not coping'
- C. prescribe Cathy an antidepressant
- D. tell Cathy that many people have busy lives but that in itself would not cause tiredness
- E. tell Cathy she seems very capable.

Question 4

Cathy tells you that her husband has recently been made redundant and she feels under pressure to keep her job and keep the family afloat financially. She is sleeping poorly and feeling anxious. Choose the incorrect response.

- A. if Cathy is not clinically depressed the GP can't offer anything for these problems
- B. psychological rating scales such as Sphere 12, HAD or K10 may be useful in assessment and monitoring
- C. sleep/wake cycle management may assist Cathy
- D. structured problem solving may be helpful
- E. teaching relaxation techniques would be appropriate.

Case 2 - Daniel Barker

Daniel Barker, aged 27 years, is a bank teller and keen rower. He tells you he had the flu when his daughter was about six weeks old and feels he hasn't really got over it. He has had persistent fatigue, frequent headaches and muscle aches and pains for six months. He rarely goes rowing because, if he does, he is exhausted for days afterwards.

Question 1

Daniel's physical examination and urinalysis are normal. What investigations would you consider appropriate at this stage?

- A. FBE and ESR
- B. TSH and blood glucose
- C. U&E, Cr and LFTs
- D. all of the above
- E. none, as recent studies have revealed a low yield from pathology testing for fatigue.

Question 2

What additional investigations are required to diagnose chronic fatigue syndrome (CFS)?

- A. fasting morning cortisol
- B. Epstein-Barr virology including nuclear antibody
- C. antinuclear antibodies
- D. all of the above
- E. none of the above.

Question 3

Daniel's investigations are all normal. You discuss CFS with him. You tell Daniel:

A. CFS is a form of depression with somatisation predominating

- B. it is not possible to make a positive diagnosis of CFS
- C. there is no treatment for CFS
- D. there are no specific tests for CFS but a diagnosis can still be made
- E. CFS does not have any serious health consequences.

Question 4

Applying the patient centred clinical method in Daniel's care involves all except:

- A. establishing a definitive diagnosis before commencing management
- B. exploring the changes fatherhood has made to Daniel's life
- C. finding common ground with Daniel on the problems he is experiencing and the goals of treatment
- D. incorporation of prevention and health promotion
- E. being realistic about likely outcomes.

Case 3 - Anna Demetriou

Anna Demetriou, aged 39 years, is a single parent with little family support. She has a past history of anxiety and depression but ceased medication two years ago. She presents with poor sleeping (difficulty falling asleep, waking frequently and daytime naps) and fatigue. Physical examination is normal.

Question 1

Considering Murtagh's safety diagnostic model the probability diagnosis in Anna's case is likely to be:

- A. hypothyroisim
- B. hyperthyroidism
- C. depression
- D. sleep apnoea
- E. anaemia.

Question 2

You perform screening tests for psychological and somatic distress. Anna's Sphere 12 indicates both psychological (score 5) and somatic (score 4) distress. Her HAD scale rated 9 for both anxiety and depression (normal range <7, significant anxiety/depression >11). Appropriate management at this stage includes all except:

- A. psychoeducation
- B. sleep/wake cycle management
- C. FBE, TSH
- D. short term benzodiazepines to restore normal sleep
- E. commencement of a mental health assessment and plan as part of the BOiMH.

Question 3

Anna's blood tests show a normal FBE and a high TSH (and low T4). Specific questioning revealed recent cold intolerance and hair loss. She is sleeping a little better by adhering to good sleep hygiene but remains tired. You:

- A. commence Anna on thyroxine replacement
- B. tell her she doesn't need to practice relaxation techniques any more
- C. tell her to discontinue her sleep strategies
- D. commence her on thyroxine for hypothyroidism and an SSRI for depression
- E. A and C.

Question 4

Four weeks later Anna's sleep pattern and fatigue has improved considerably with thyroxine replacement. Your follow up plan includes all except:

- A. regular appointments over the next few months
- B. referral to a psychiatrist and endocrinologist for ongoing management
- C. monitoring for symptoms of depression
- D. completing the mental health assessment/plan/review process
- E. encouraging continued behavioural strategies for sleep and anxiety.

Case 4 – Jo Czebranski

Jo Czebranski, aged 27 years, presents with a four month history of fatigue. He has been a vegan for 10 years and has had no problems with fatigue before. He gets intermittent abdominal cramps and diarrhoea, but associates this with anxiety. Jo's Hb is 81 g/L and his MCV is 106 fL, with hypersegmented neutrophils in the peripheral blood film.

Question 1

Of the following combinations, choose the most appropriate next tests:

- A. serum ferritin
- B. serum B12, serum folate and red cell folate
- C. serum B₁₂ and parietal cell antibodies
- D. serum folate and parietal cell antibodies
- E. serum folate, serum B₁₂ and intrinsic factor antibodies.

Question 2

A dietary review indicates Jo eats a well balanced diet with plenty of green leafy vegetables. Jo's results are: serum B12 130 pmol/L, serum folate 5 nmol/L, red cell folate 290 nmol/L. The best next step would be:

- A. folate replacement and recheck FBE in three months
- B. small bowel biopsy
- C. antigliadin and anti-endomysial antibodies and commence folate
- D. parietal cell and intrinsic factor antibodies, commence B₁₂ supplements
- E. commence folate and B12 supplements.

Question 3

Jo's screening tests for coeliac disease are positive. Choose the correct statement.

- A. refractory folate deficiency may be an indicator of coeliac disease
- B. 10% of those with positive antibody tests will have coeliac disease confirmed on small bowel biopsy
- C. refractory iron deficiency may be an indicator of coeliac disease
- D. all of the above
- E. A and C are correct.

Question 4

You tell Jo the best next step is:

- A. endoscopy and small bowel biopsy
- B. review by a dietician and commencement of a gluten free diet
- C. stopping his vegan diet
- D. gluten free diet for three months then repeating his FBE and antibodies
- E. all of the above.