



Questions for this month's clinical challenge are based on articles in this issue. The clinical challenge is endorsed by the RACGP Quality Improvement and Continuing Professional Development (QI&CPD) program and has been allocated 4 Category 2 points. Answers to this clinical challenge are available immediately following successful completion online at www.gplearning.com.au. Clinical challenge quizzes may be completed at any time throughout the 2011–13 triennium, therefore the previous months answers are not published.

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

Mavis

Mavis is an office worker aged 58 years who presents with a 2-year history of worsening left knee pain and swelling that are now preventing her from playing golf. Her body-mass index (BMI) is 32 kg/m² and she has well controlled hypertension and impaired glucose tolerance. Examination reveals full range of movement of both knees with crepitus and effusion, particularly on the left knee. The joint margin is tender. She has had some benefit on the level of pain by using oral diclofenac, but is reluctant to take this regularly.

Question 1

Which of the following imaging features does not correlate with the experience of knee pain?

- A. Osteophytes
- B. Joint space narrowing
- C. Bone marrow lesions
- D. Synovitis
- E. Meniscal tear at the anterior horn.

Question 2

Which of the following features on MRI would suggest a trial of bisphosphonate therapy could be considered?

- A. Cartilage defects
- B. Meniscal tear
- C. Bone marrow lesions
- D. Decreased subchondral bone density
- E. Synovitis.

Question 3

Intra-articular corticosteroid injections are more likely to be of benefit for Mavis because she has which feature?

- A. Tender joint margin
- B. Effusion
- C. Normal range of movement
- D. Obesity
- E. Response to oral NSAIDs.

Mavis has 3-monthly intra-articular corticosteroid injections over 18 months with good efficacy, but the benefit of these injections then starts to decrease.

Question 4

In Mavis's case, which of the following is the next therapeutic intervention most likely to result in a reduction of pain?

- A. Total knee replacement
- B. Oral duloxetine
- C. Muscle strengthening exercise
- D. Surgically assisted weight loss
- E. Arthroscopy and meniscal repair.

Case 2

Fred

Fred, aged 45 years, presents with a 3-week history of moderately severe neck pain. The pain is dull and aching with radiation to the right scapula. He is not experiencing any numbness or paraesthesiae. His work environment is currently very stressful and he is concerned that an incorrect set up of his desk at work is exacerbating the problem. He is generally well, a non-

smoker and drinks socially. Fred has a history of testicular cancer as a 20 year old for which he has ongoing regular follow up. Examination reveals a non-tender cervical spine with restricted lateral flexion and rotation due to pain.

Question 5

You decide that imaging is indicated in this case. What feature of Fred's presentation has led you to this conclusion?

- A. Age >40 with new symptoms
- B. History of malignancy
- C. Moderately severe pain lasting 3 weeks
- D. Suspicion of cervical spondylosis as a diagnosis
- E. Restricted range of movement.

Question 6

When considering imaging in non-traumatic neck pain, which of the following is most correct?

- A. CT is the first-line test in suspected bony pathology
- B. Multi-view plain radiography should be performed initially
- C. MRI or CT can be used to assess for potential neurological compromise
- D. Degenerative radiographic changes correlate well with pain
- E. MRI is indicated as first line if malignancy is suspected.

Question 7

Fred's imaging is normal. On the available evidence, which therapeutic approach is most likely to result in significant improvement in symptoms, at least in the short term?

- A. Manual therapy (mobilisation)
- B. Cognitive behavioural therapy
- C. Facet joint injection
- D. Physical therapy (exercises)
- E. Analgesia and counselling from the GP.

Question 8

Fred fails to improve over the next four weeks. Which of the following 'yellow flags' is most likely to be relevant in this case?

- A. Attitude that neck pain can be severely disabling
- B. Reduced activity levels
- C. Financial hardship
- D. Worker's compensation claim
- E. Alcohol abuse.

Case 3**Francis**

Francis, 35 years of age, presents with arthralgias of several weeks duration. She is known to be hepatitis C (HCV) positive.

Question 9

Polyarthralgias occur in what percentage of patients with chronic HCV infection?

- A. 5%
- B. 10%
- C. 20%
- D. 40%
- E. 80%.

Question 10

Francis recently received a vaccination. Which vaccine is often associated with the development of arthritis, especially in women?

- A. Rubella
- B. Tetanus
- C. Hepatitis A
- D. Typhoid
- E. Hepatitis B.

Question 11

What features would suggest rheumatoid arthritis?

- A. Symptom duration of longer than 6 weeks
- B. Early morning stiffness for longer than one hour
- C. Arthritis in three or more regions
- D. Symmetry of affected areas
- E. All of the above.

Question 12

Francis has recently returned from a rainforest trek in northern Queensland. Which one of the following features is not consistent with a diagnosis of Ross River virus?

- A. Polyarthralgia
- B. Myalgia
- C. Maculopapular rash
- D. Jaundice
- E. Fever.

Case 4**Sylvia**

Sylvia, 27 years of age, presents with gradual onset of lower back pain over the past several months. She describes the pain as dull and localised to the lower back. She feels very stiff for up to an hour in the morning and finds that her symptoms improve with exercise and ibuprofen.

Question 13

Which features are characteristic of inflammatory back pain?

- A. Improves with exercise
- B. Morning stiffness lasting longer than 45 minutes
- C. Age less than 40 years
- D. Insidious onset
- E. All of the above.

Question 14

Which statement regarding diagnostic tests in ankylosing spondylitis (AS) is correct?

- A. The presence of definite X-ray changes of sacroiliitis is required for the diagnosis of AS
- B. HLA-B27 is a specific but not sensitive test for AS
- C. Non-radiographic axial spondyloarthritis is not associated with the development of AS
- D. 'Bamboo spine' is characteristic of early AS
- E. Ultrasound has an established role in the detection of sacroiliitis.

Question 15

Which statement regarding extra-articular features of AS is incorrect?

- A. Uniocular anterior uveitis occurs in about 40% of patients
- B. About 60% of AS patients have mucosal inflammation on colonoscopy
- C. Patients with AS are at risk of developing aortic valve incompetence
- D. There is no increased risk of vertebral fracture
- E. Apical pulmonary fibrosis occurs in up to 15% of patients with AS.

Question 16

Clinical features and X-ray results confirm the diagnosis of AS in Sylvia's case. Which statement regarding the use of medications is correct?

- A. TNF inhibitors are first line therapy in AS
- B. Regular NSAID use in AS slows radiographic progression more than on-demand use

- C. TNF inhibitors slow spinal fusion
- D. Methotrexate is useful in the treatment of spinal disease
- E. TNF inhibitors are listed on the PBS for the treatment of non-radiographic axial spondyloarthritis.