



Instructions for clinical challenge online

Clinical challenge is now **ONLY available as an online activity. Please follow the steps below to log on to and launch the activity.**

Clinical challenge online means:

- you will receive your 4 QA&CPD points immediately on successful completion of the quiz
- you can view question feedback after you have achieved a score of 12 or more correct answers, and
- you can re-enrol in the activity a number of times in order to achieve a sufficient score.

To complete clinical challenge online go to:

- www.racgp.org.au/clinicalchallenge
- if you are completing the quiz online for the first time, click on '**click here to register**'
- fill out the registration details – remember to choose your own username and password - and click on '**sign up**'
- if you have completed clinical challenge online previously, click on '**login here**'. Use the username and password you selected last time you completed clinical challenge online
- click on '**AFP clinical challenge**'
- click on '**enrol**'
- click on '**launch activity**'
- answer each case question by clicking on the correct answer box.

Clinical challenge online is simple and quick. You can view the articles to which each question relates, and you get immediate feedback on your answers. You can complete the quiz in one 'hit' or over a few days or weeks.

Clinical challenge online must be submitted by the last day of each month of publication.

AFP clinical challenge online

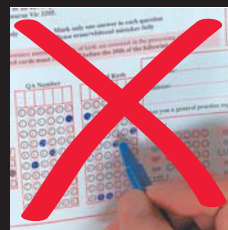
USERNAME _____

PASSWORD _____

Please record your details here, cut out and keep in a safe place

PLEASE NOTE:

**CLINICAL CHALLENGE CARDS
WILL NO LONGER BE ACCEPTED**





Clinical challenge



Questions for this month's clinical challenge are based on 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 – Samantha Stone

Samantha Stone, 14 years of age, is on school camp at a bush retreat. She tripped during a night bush walk and fell onto her outstretched right hand. You are called by the supervising teacher at 9.30 pm and agree to see Samantha at the local hospital.

Question 1

Samantha is distressed and complains of pain in her wrist and lower forearm. Important features in assessment include:

- A. Samantha's hobbies and talents
- B. drug history
- C. Samantha's medical history
- D. other injuries from the fall
- E. all of the above.

Question 2

Samantha requires pain relief. Samantha weighs 50 kg. Options include all except:

- A. ice
- B. paracetamol 1 g orally
- C. temporary splinting
- D. pethidine 100 mg intramuscularly
- E. ibuprofen 500 mg orally.

Question 3

You consider the possibility of scaphoid

fracture because of the mechanism of injury. Choose the correct statement:

- A. absence of significant localised tenderness in the anatomical snuffbox excludes a scaphoid fracture
- B. scaphoid tenderness can be elicited by pressure on the volar aspect of the ulnar side of the wrist
- C. the scaphoid is compressed by pushing the thumb and first metacarpal toward the radius
- D. one test of scaphoid tenderness is sufficient to exclude scaphoid fracture
- E. clinical tests for scaphoid pain are of little value as scaphoid fractures are easily seen on X-ray.

Question 4

Samantha has scaphoid tenderness. No fracture is apparent on X-ray. The best management plan is to:

- A. send her home with a crepe bandage and tell her to get an X-ray in 10 days
- B. apply a scaphoid plaster and explain the need for plaster check next day and re-X-ray in 10 days
- C. communicate directly Samantha's local GP regarding follow up
- D. apply a scaphoid plaster and ask her to see you in 6 weeks time
- E. B and C.

Case 2 – William Fossick

Will Fossick, aged 59 years, was 'spring' cleaning. He felt a sharp pain on his right hand and noted several black spiders in the box he was sorting. The spider that had bitten him had a reddish stripe over its abdomen.

Question 1

Which of the following clinical features is most strongly indicative of redback spider bite:

- A. pain at the bite site
- B. localised or regional sweating
- C. nausea and vomiting
- D. headache
- E. tender regional lymphadenopathy.

Question 2

Over the next few hours, the pain in Will's hand spreads to the entire limb. First aid measures for redback spider bite include:

- A. heat packs
- B. paracetamol
- C. pressure immobilisation
- D. opiate analgesics
- E. diazepam.

Question 3

Will develops headache, nausea and vomiting. You consider the role of redback antivenom. Choose the correct response:

- A. antivenom is only indicated for patients with systemic symptoms
- B. antivenom is only indicated for patients with severe life threatening symptoms
- C. antivenom is indicated for severe local pain
- D. allergic reaction to antivenom occurs in 10% of cases
- E. allergy to horses is a contraindication to administration.

Question 4

Will's headache and systemic symptoms worsen. You give Will redback antivenom in the ER of the local hospital. Choose the correct statement. Redback antivenom:

- A. should not be given intravenously because of the risk of collapse
- B. should be given IV in severe envenomation
- C. initial dose is 1000 units (two vials)
- D. should be repeated if no response within 15 minutes
- E. is only effective if given within 4 hours of the bite.

Case 3 – Naheed Mustafa

Naheed Mustafa, aged 73 years, lives at home with her daughter and rarely leaves the house. She has a past history of inflammatory bowel disease that has required prednisolone intermittently for control.

Question 1

A veiled Mrs Mustafa comes in for a plaster check for a fractured wrist she sustained in a fall at home yesterday. You consider her risk factors for osteoporosis, falls and fracture. Choose the incorrect response:

- A. inflammatory bowel disease is associated with osteoporosis and vitamin D deficiency
- B. vitamin D deficiency is an independent predictor of falls
- C. having had one fracture, Mrs Mustafa is at increased risk of further fracture
- D. veiled women are at risk of vitamin D deficiency
- E. doses of prednisolone over 2.5 mg per day for 3 months are associated with bone loss.

Question 2

As part of your assessment you arrange a DEXA scan. Her T-score is -2.6 and her Z-score is -2.3:

- A. Mrs Mustafa is ineligible for a Medicare rebate for her DEXA scan
- B. the T-score reflects osteopenia
- C. the T-score reflects osteoporosis
- D. a pathological cause of bone loss is unlikely
- E. medication for treatment of osteoporosis would not be covered by the PBS.

Question 3

You discuss medication for osteoporosis with Mrs Mustafa and her daughter:

- A. calcium and vitamin D significantly reduce hip and vertebral fractures
- B. bisphosphonate treatment reduces vertebral fracture risk
- C. the evidence for calcitriol in fracture prevention is stronger than for bisphosphonates
- D. oestrogen replacement therapy (ERT) does not reduce fracture risk
- E. there is no evidence for reduction in fracture rates with raloxifene.

Question 4

Further investigation reveals a serum 25 OHD (vitamin D) of 11 mmol/L. You suggest:

- A. vitamin D 3000–5000 IU per day
- B. vitamin D 800–1000 IU per day
- C. vitamin D 600 IU per day
- D. 5 minutes of sunlight to hands, face and arms 4 times per week to correct vitamin D deficiency
- E. no treatment is required.

Case 4 – Sid Bender

Sid Bender, aged 65 years, is a retired builder. Apart from hearing loss that he attributes to long term noise exposure at work, he has no significant medical problems. Over the past couple of years he has been experiencing musculoskeletal pains and more recently has had severe pain localised to his right hip and thigh.

Question 1

On examination Sid has restricted range of movement in his right hip. X-ray reveals mild to moderate osteoarthritic changes in the right hip and changes consistent with Paget disease (PD) in the upper femur. X-ray features of PD include all except:

- A. cortical thickening
- B. bowing of long bones
- C. disruption of normal trabecular pattern
- D. mixed osteolysis and sclerosis

- E. circumscribed sclerotic areas in the skull in early lesions.

Question 2

A radionucleotide bone scan reveals increased uptake in the femur, pelvis and skull, and serum alkaline phosphatase is significantly elevated at 303 U/L. Liver function tests are otherwise normal. In PD:

- A. sites of radionuclide uptake correlates poorly with symptoms
- B. radionucleotide scans are more sensitive than plain X-ray in identifying affected bones
- C. the degree of elevation of alkaline phosphatase is a good predictor of subsequent fracture
- D. 50% of patients will have elevated alkaline phosphatase
- E. alkaline phosphatase elevation does not correlate well with the extent of skeletal involvement.

Question 3

You discuss PD symptoms and complications with Sid. Choose the correct statement:

- A. the majority of patients have no symptoms
- B. bony swelling or deformity is the most common symptom
- C. fracture and arthritis are the most common complications
- D. heart failure and ischaemic heart disease are increased in PD patients
- E. hearing loss and tinnitus occur in the majority of patients.

Question 4

Sid's management options include an oral bisphosphonate for 6 months because:

- A. treatment is likely to improve his symptoms
- B. treatment will prevent fracture
- C. bisphosphonates normalise bone turnover in all patients in 3-6 months
- D. bisphosphonates will normalise his bone scan appearance within 3-6 months
- E. there will be no need for further treatment after 6 months.