

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. Steve Trumble

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.

Doing a winter locum at the Thredbaw Medical Centre seemed like such a good idea at the time. The kids are happy enough to be skiing all day, but your waiting room is full!

Case 1 – Noah Vale

Noah Vale, 35 years of age, is visiting the snow for the first time. He wants to try skiing and snowboarding when he comes back in three months time. He asks what the various risks are and what he should do to prepare for snow sports.

Question 1

Compared to snowboarders, skiers have a higher incidence of:

- A. head injury
- B. spinal injury
- C. shoulder injury
- D. knee injury
- E. ankle injury.

Question 2

A friend has offered him some old sets of boots and skis. It is correct to advise him that:

- A. he should adjust the bindings so they will only release with manual pressure
- B. a lower cut boot will take the load off his ankle

- C. his bindings should only release under conditions of severe torsion
- D. his boots should allow him to jump at least 62 cm vertically
- E. he should have the bindings professionally serviced before each season.

Question 3

A useful fitness aid for improving core strength is the:

- A. medicine ball
- B. Cybex machine
- C. exercise bike
- D. jumping box
- E. hot tub.

Question 4

An appropriate height box for Noah to jump onto to develop his fitness at home is:

- A. 10 cm
- B. 20–30 cm
- C. 40–50 cm
- D. 50–60 cm
- E. 60–70 cm.

Case 2 – Charlotte Hotham

Next through the door is 21 year old Charlotte Hotham. She is carried in by two ski instructors, having injured her right knee on the slopes.

Question 1

Knee injuries account for approximately what percentage of skiing injuries?

- A. 15%
- B. 35%
- C. 55%
- D. 75%
- E. 90%.

Question 2

Charlotte tearfully explains that the instructors, Hans and Neis, were showing her how to 'snowplough' when she fell awkwardly but gently face first. She is tender at the medial joint line of her knee. The most likely structure to be damaged is her:

- A. anterior cruciate ligament
- B. posterior cruciate ligament
- C. medial meniscus
- D. medial collateral ligament
- E. tibial plateau.

Question 3

Hans begins to reminisce about his first knee injury, when he landed heavily on his heel while attempting a jump. This mechanism of injury can drive the tibia upward and damage the:

- A. anterior cruciate ligament
- B. posterior cruciate ligament
- C. medial meniscus
- D. medial collateral ligament
- E. tibial plateau.

Question 4

Not to be outdone, Neis boasts how he once fell at full speed while on the piste and broke his leg. This is most likely to have been a:

- A. fractured neck of femur
- B. fractured shaft of femur
- C. spiral fracture of tibia and fibula
- D. spiral fracture of fibula
- E. Potts fracture.

Case 3 – Russell Wanaka

The men carry Charlotte away to her ski lodge and her place is taken by Russell Wanaka, a lift operator who is also a key player for the local rugby team. The team is heading for a berth in the finals but Russell has injured his hamstring at training.

Question 1

Risk factors for hamstring injury include all of the following except:

- A. stretching to catch an overhead ball
- B. age
- C. previous injury
- D. scooping a ball off the ground while running
- E. low hamstring strength.

Question 2

Russell's position on the team does not involve much running. He is an invaluable member of the scrum, however, and his injury seems minor. It is possible that he will be able to return to play:

- A. almost immediately
- B. no sooner than two weeks
- C. after one month
- D. after eight weeks
- E. not until next season.

Question 3

After returning to play, Russell is at particular risk of reinjuring his hamstring for at least:

- A. the next week
- B. the next month
- C. 6-8 weeks
- D. three months
- E. one year.

Question 4

Russell has also suffered from Achilles tendinopathy. Helpful management techniques include all except:

- A. gradual loading exercises
- B. eccentric strengthening exercises
- C. heel raises
- D. boot wedges
- E. cortisone injections.

Case 4 – Sam Moritz

Sam Moritz is next. She is 19 years of age and has been working as a bartender while living on left-over junk food. This has resulted in severe constipation and resultant haemorrhoids.

Question 2

Sam complains of an anal lump that appears with defecation and which she needs to push back in manually. It bleeds. She has a haemorrhoid of which degree?

- A. first
- B. second
- C. third
- D. fourth
- E. fifth.

Question 2

Which of the following symptoms is Sam most unlikely to have?

- A. rectal bleeding
- B. anal pain
- C. rectal discharge
- D. anal irritation
- E. feeling of incomplete defecation.

Question 3

On digital examination, Sam's haemorrhoids are likely to be:

- A. unable to be palpated
- B. exquisitely tender
- C. felt as a hard little lump
- D. grossly oedematous
- E. covered by skin.

Question 4

Definitive treatment of Sam's haemorrhoids can be best achieved with:

- A. dietary modification
- B. topical creams
- C. suppositories
- D. rubber band ligation
- E. haemorrhoidectomy.