

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, Paul Arduca

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 – Justin O'Toole

Justin O'Toole, aged 25 years, works at the local abattoirs and is the star of the local football team. He comes in with a work related laceration on his left hand, which you suture. Past attendances have included nonspecific urethritis and a fracture of his right fifth metacarpal.

Question 1

Significant health issues in caring for Justin include:

- A. work related injuries
- B. anger management
- C. Q fever prevention
- D. risk taking behaviours
- E. all of the above.

Question 2

Five days later Justin attends because his wound is red, painful and oozing. You prescribe cephalexin. He asks if he can drink alcohol when on antibiotics, as he has a party to go to at the weekend. You:

- A. say 'yes, sure, have a good time'
- B. tell him that alcohol does not interact with cephalexin
- C. tell him not to drink alcohol at all as it is bad for him
- D. use this an opportunity to open up discussion about 'at risk' behaviour
- E. tell him not to drink alcohol excessively.

You organise a night at the football club with a dietician and sports physiotherapist, to talk about being fit and healthy to play well.

Question 3

Which is the least useful strategy in engaging men in caring for their health?

- A. connecting health promotion behaviour to what men want to do
- B. clinics/meetings in sporting venues and workplaces
- C. regular three monthly short consultations
- D. after hours appointments
- E. displaying men's health posters and educational material in waiting rooms.

Question 4

Three months later Justin presents for 'a check up', having engaged in unprotected sex. Appropriate management would not include:

- A. an STI check and discussion of 'safer sex'
- B. telling Justin he has behaved badly and needs to get his act together
- C. making a long appointment for test results and further discussion of health promotion issues
- D. assessing risk behaviours
- E. mental health assessment.

Case 2 – Sam Klein

Sam Klein, aged 24 years, presents with his wife of six months. Somewhat uncomfortable, he tells you that his lack of libido is causing tension in their marriage.

Question 1

Important features in the history include:

- A. pubertal development
- B. relationship difficulties
- C. determining whether there is ED
- D. mood disturbance
- E. all of the above.

Question 2

You suspect Sam may have androgen deficiency. Diagnosis involves:

- A. single morning serum total testosterone less than 8 nM
- B. free testosterone less than 8 nM
- C. two separate morning serum total testosterone levels less than 8 nM
- D. serum total testosterone between 8-15 nM and LH <0.5 of normal level
- E. free testosterone 8-15 nM and LH <0.5 normal level.

Question 3

On examination Sam is 188 cm tall, has sparse facial hair and small firm testes 3-4 mL in volume. Klinefelter syndrome:

- A. is confirmed with karyotyping of 47 XYY
- B. causes infertility
- C. is mostly diagnosed during puberty
- D. results in patients arm span being at least 5 cm less than the height
- E. all of the above.

Question 4

Regarding treatment of androgen deficiency:

- A. testosterone pellets are inserted intramuscularly
- B. the standard dose of testosterone pellet required is 600-800 mg every 4-6 months

- C. oral testosterone is usually first line therapy
- D. intramuscular testosterone is given every six weeks
- E. none of the above.

Case 3 – Allan Brown

Allan, 36 years of age, presents with erectile dysfunction for the past 3–6 months. His wife has discontinued the OCP as she wants to become pregnant. Allan has early morning erections and no difficulty with masturbation.

Question 1

Regarding erectile dysfunction (ED):

- A. ED may be a predictor of cardiovascular disease
- B. 75% of men with ED get effective treatment
- C. organic ED is most commonly neuro-pathic in origin
- D. psychological causes of ED are more common than organic causes
- E. psychological ED is more common in older men and is often situational.

Question 2

Allan reveals he feels overwhelmed by the idea of the commitment and responsibility of parenthood. You advise Allan:

- A. anxiety is a common cause of situational ED
- B. PDE5 inhibitors are not indicated for psychological causes of ED
- C. due to psychological issues, medical assessment of his ED is not needed
- D. his ED would resolve if he had a vasectomy
- E. to tell his wife he doesn't want children.

Question 3

Allan attends a year later. He and his wife have been unable to conceive as Allan has a very low sperm count. Choose the most correct response:

- A. donor insemination is his best option
- B. intracytoplasmic injection techniques (ICSI) are best performed using sperm from the ejaculate
- C. ICSI can achieve a pregnancy with a single viable sperm

- D. ICSI achieves pregnancy rates of 60%
- E. sperm retrieval from epididymus or testes is a difficult procedure requiring general anaesthetic.

Another year later Allan attends with a lump in his left testis. He recalls having an operation for undescended testes aged 12 years. He is diagnosed with testicular cancer.

Question 4

Choose the correct response. Testicular cancer:

- A. is twice as common in men who have had undescended testes
- B. risk is reduced if orchidopexy for undescended testes is performed before the age of 10 years
- C. is four times more common in men who have had infantile herniae
- D. has a five year survival of 75%
- E. is the commonest cancer in men aged over 35 years.

Case 4 – Steve Falls

Steve Falls, aged 48 years, has a history of coronary angioplasty 18 months ago. He is now symptom free. His current medications are atorvastatin 60 mg, ramipril 2.5 mg and aspirin 100 mg. He consults you regarding a loss of interest in sex. On closer questioning his desire is not lacking but his ability to obtain an erection is.

Question 1

You tell Steve:

- A. his ED is most likely psychological
- B. the coexistence of ED and cardiac problems is coincidental
- C. he should not be prescribed a PDE5 inhibitor because of his cardiac history
- D. he should not take any nitrate medication while taking sildenafil
- E. first line therapy with sildenafil has a 40% chance of successfully treating ED.

Question 2

You prescribe sildenafil. Steve returns for a repeat prescription and would like to try a longer lasting medication. Differences

between sildenafil and tadalafil include:

- A. tadalafil does not require sexual stimulation, unlike sildenafil
- B. sildenafil has an onset of action of 30 minutes and duration of action of six hours
- C. tadalafil has an onset of action of 60 minutes and a duration of action of 24 hours
- D. sildenafil absorption is decreased by a heavy meal
- E. the efficacy of both sildenafil and tadalafil is reduced by alcohol.

Two months later, Steve presents following an episode of central chest pain lasting 20 minutes. His last dose of tadalafil was 24 hours ago.

Question 3

Regarding PDE5 inhibitors and nitrate medication, choose the most correct response:

- A. Steve can have angina as his PGE5 inhibitor would no longer be active
- B. PGE5 inhibitors act directly to increase NO release in corporeal smooth muscle cells
- C. the combination of PDE5 inhibitors and nitrate medication can cause profound hypotension
- D. hypotension is a very common side effect of both nitrates and sildenafil
- E. all of the above.

Question 4

Steve is discharged from hospital on isosorbide mononitrate for control of angina. A month later he is symptom free and requests alternative ED treatment. Choose the most correct response:

- A. apomorphine acts centrally in the hypothalamus to improve initiation of erection during sexual stimulation
- B. apomorphine has efficacy comparable to PDE5 inhibitors
- C. intracavernosal injections require sexual stimulation to produce an erection
- D. priapism following intracavernosal injections is exacerbated by decongestant medication
- E. none of the above.