Clinical challenge

These questions are based on the Focus articles in this issue. Please choose the single best answer for each question.

CASE 1

Charles, a man aged 50 years, presents to discuss daytime tiredness.

QUESTION 1

What percentage of the Australian population has at least moderate obstructive sleep apnoea (OSA)?

- A. 5%
- **B.** 10%
- c. 20%
- **D.** 40%

QUESTION 2

The recommended first-line treatment for insomnia is:

- a. cognitive behavioural therapy for insomnia (CBTi)
- B. melatonin 1-2 hours before bed
- **c.** dietary modification to avoid stimulants
- **D.** strict adherence to a sleep diary

QUESTION 3

In-laboratory sleep assessment is relevant for patients with hypercapnic respiratory failure, patients with a high pretest probability of OSA and about to undergo major surgery, those with a history of significant drowsiness while driving and patients with

- A. STOP-Bang score ≥3
- B. Epworth Sleepiness Scale ≥8
- c. type 2 diabetes mellitus
- D. unstable cardiovascular status

CASE 2

Fiona, a woman aged 39 years, would like to discuss reasons why she struggles to sleep.

OUESTION 4

Screening questionnaires that can help general practitioners (GPs) diagnose OSA include the OSA50, STOP-Bang and

- A. Berlin
- B. Edinburgh
- c. Florence
- D. Chicago

QUESTION 5

The major treatment options available for symptomatic OSA are positive airway pressure therapy, mandibular advancement splints, sleep apnoea surgery, weight loss and

- A. positional therapy
- B. nasal strips
- c. intranasal steroids
- oral antihistamines

QUESTION 6

What is the first-line treatment for most adults with symptomatic moderate-to-severe OSA?

- a. nocturnal mandibular advancement splints
- B. sleep apnoea airway surgery
- c. continuous positive airway pressure
- D. 10% body weight loss

CASE 3

Jill, a child aged 18 months, is brought in by her mother who is concerned about her sleeping habits.

QUESTION 7

By what time should daytime naps have finished in toddlers to promote sleep at bedtime?

- **A.** 12.00 pm
- **B.** 2.00 pm
- **c.** 4.00 pm
- **D.** 6.00 pm

Continued on page 396.



The five domains of general practice

- (D1) Domain 1: Communication skills and the patient–doctor relationship
- (D2) Domain 2: Applied professional knowledge and skills
- D3 Domain 3: Population health and the context of general practice
- (D4) Domain 4: Professional and ethical role
- (D5) Domain 5: Organisational and legal

These domains apply to all Focus articles, which are required reading for the Clinical challenge CPD activity.

How to use AJGP for your CPD

Each issue of the Australian Journal of General Practice (AJGP) has a focus on a specific clinical or health topic. Many GPs find the entire issue of interest and of relevance to their practice; some GPs find one or more articles in the journal relevant.

You can use AJGP for your CPD. If you want to use the entire issue for CPD, you must work your way carefully through each article in the issue and complete the Clinical challenge. When you do this, take time to read the articles carefully and critically, and think carefully about how you might adjust your practice in response to what you have learned.

We recommend that you access *AJGP*, the articles and the Clinical challenge through gplearning (https://gpl.racgp.org.au/d2l/home) (Activity ID: 849959). Then, when you complete the articles and the Clinical challenge, your CPD hours are automatically credited to your CPD account. If you work through the full issue of *AJGP* and complete the Clinical challenge, you will receive 12 CPD hours (six hours' Educational Activities and six hours' Reviewing Performance).

If you do not want to do the full *AJGP* issue, and you prefer to select one or more articles to read, you can QuickLog the CPD hours directly through your myCPD dashboard. As guidance, each article in *AJGP* would provide 1–2 CPD hours, split half Educational Activities and half Reviewing Performance.



QUESTION 8

Polysomnography data from a cohort of children in the Northern Territory revealed what percentage of First Nations Australian children to be experiencing sleep apnoea compared to 44% in other Australian children?

- A. 37%
- **B.** 45%
- c. 55%
- **D.** 62%

CASE 4

Robert, a boy aged 15 years, presents to discuss difficulty sleeping that is affecting his employment in a fast-food restaurant.

QUESTION 9

Chronic diseases linked to worse sleep in children include allergic rhinitis, cancer, cystic fibrosis, epilepsy, type 1 diabetes and:

- A. arthritis
- **B.** cardiomyopathy
- c. glomerulonephritis
- D. asthma

QUESTION 10

What is the most common 'strategy' used by shift workers to manage sleepiness?

- A. accept it and keep going
- B. take micro naps at work
- c. wear an eye mask in bed
- **D.** take oral caffeine tablets during shifts

These questions are based on the Focus articles in this issue. Please write a concise and focused response to each question.

CASE 1

Charles, a man aged 50 years, presents to discuss daytime tiredness.

QUESTION 1

List the two most prevalent sleep disorders in the adult Australian population.

CASE 2

Fiona, a woman aged 39 years, would like to discuss reasons why she struggles to sleep.

QUESTION 2

List six aspects of the physical examination for obstructive sleep apnoea.

OUESTION 3

List four negative health outcomes associated with OSA.

QUESTION 4

State four benefits of continuous positive airway pressure (CPAP) other than improved apnoea-hypopnoea index/Epworth Sleepiness Scale and quality of life.

CASE 3

Jill, a child aged 18 months, is brought in by her mother who is concerned about her sleeping habits.

QUESTION 5

Define what is meant by the term 'brief resolved unexplained event' (BRUE).

QUESTION 6

List three presentations of parasomnias.

QUESTION 7

State the four red flag signs and symptoms in a noisy infant that warrant referral.

CASE 4

Robert, a boy aged 15 years, presents to discuss difficulty sleeping that is affecting his employment in a fast-food restaurant.

QUESTION 8

List six strategies to optimise sleep hygiene in adolescents.

QUESTION 9

Define what is meant by the term 'insomnia'.

QUESTION 10

Define what is meant by the term 'shift work disorder'.

May 2024 Multiple-choice question answers

ANSWER 1: D

The second most common type of cancer among men worldwide is prostate cancer.

ANSWER 2: C

A structured surveillance strategy for prostate cancer with curative intent is active surveillance.

ANSWER 3: A

For men with moderate-to-severe lower urinary tract symptoms (LUTS), alpha 1-blockers aim to inhibit the effect of endogenously released noradrenaline on smooth muscle cells in the prostate and thereby reduce prostate tone and bladder outlet obstruction.

ANSWER 4: C

The most frequent adverse side effects of alpha 1-blockers are orthostatic hypotension and retrograde ejaculation.

ANSWER 5: A

A non-antibiotic therapy for recurrent urinary tract infection (rUTI) that prevents bacterial adherence to the bladder mucosa is D-mannose.

ANSWER 6: B

Important perioperative considerations prior to gender affirmation surgery include hair removal, preoperative hormonal levels, fertility planning and family planning.

ANSWER 7: D

The postulated aetiology of stress urinary incontinence includes intrinsic sphincter deficiency and urethral hypermobility.

ANSWER 8: A

Following initial initiation of androgen deprivation therapy, the initial surge in testosterone can cause bladder outlet obstruction and bone pain.

ANSWER 9: C

Abiraterone, a small molecule androgen receptor pathway inhibitor, must be given with prednisolone, given its adrenal suppression.

ANSWER 10: B

Monitoring suggestions for patients on hormonal therapy for prostate cancer include six-monthly bone scintigraphy, CT scan and prostate cancer distress screening.

May 2024 Short answer question answers

ANSWER 1

Active surveillance involves close monitoring of low-risk prostate cancer with curative intent, intervening with progression of disease, whereas watchful waiting involves treating symptoms arising from progressive systemic disease.

ANSWER 2

The 5-alpha reductase inhibitors (5-ARIs) inhibit the action of dihydrotestosterone and induce involution and apoptosis of the prostatic epithelium, leading to prostate size reduction.

ANSWER 3

Three potential sexual side effects of 5-ARIs include reduced libido and erectile and ejaculatory dysfunction.

ANSWER 4

In men with moderate-to-severe lower urinary tract symptoms (LUTS), alpha 1-adrenoceptor antagonists (alpha 1-blockers) can be offered as first-line medical therapy.

ANSWER 5

Six alternatives to transurethral resection of the prostate (TURP) that have emerged for the surgical management of LUTS secondary to benign prostatic hyperplasia (BPH) are:

- 1. prostatic urethral lift (UroLift)
- 2. convective water vapour energy therapy (Rezum)

- 3. aquablation
- 4. prostatic arterial embolisation (PAE)
- 5. holmium laser enucleation of the prostate (HoLEP)
- 6. photoselective vaporisation of the prostate (PVP).

ANSWER 6

rUTIs are defined as two or more episodes of uncomplicated UTI in the preceding six months, or three or more episodes diagnosed over one year.

ANSWER 7

Gender dysphoria is defined as a marked incongruence between one's experienced or expressed gender and gender assigned at birth.

ANSWER 8

Stress urinary incontinence (SUI) is considered complicated in women with neurological conditions affecting the urinary tract, and when there is concurrent pelvic pathology such as pelvic organ prolapse, previous pelvic surgery or radiotherapy.

ANSWER 9

Androgen deprivation therapy (ADT) is currently indicated for the treatment of metastatic prostate cancer and disease recurrence following attempted local curative therapy, as well as combined use with radiotherapy for intermediate or high-risk disease.

ANSWER 10

ADT acts through luteinising hormonereleasing hormone (LHRH, also known as GnRH) agonism/antagonism, which suppresses the hypothalamic-pituitarygonadal axis to reduce circulating testosterone levels.

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