Clinical challenge

Using *AJGP* for your CPD

Each issue of the *Australian Journal of General Practice* (*AJGP*) focuses on a specific clinical or health topic. Many GPs find the entire issue of interest and relevance to their practice, and others explore the issue more selectively.

Below you'll find various ways you can use *AJGP* as part of your CPD. If you want to use the entire issue for CPD, carefully and critically work your way through each Focus article, considering how you might adjust your practice in response to what you have learnt, then complete the Clinical challenge.

Your CPD will be automatically recorded for you

When you complete the *AJGP* Clinical challenge and/or Measuring Outcomes (MO) companion activity through *gplearning*, your CPD hours will be automatically recorded on myCPD Home within 12 hours.

Self-recorded reading

If you prefer to read and reflect on specific articles without completing the Clinical challenge, record this via quick log on myCPD Home. As guidance, each article in *AJGP* can be recorded for up to two CPD hours, split evenly between Educational Activities (EA) and Reviewing Performance (RP) CPD time.

Clinical challenge

The Clinical challenge consists of multiple-choice and short answer questions based on the Focus articles in this issue of *AJGP*. Complete the Clinical challenge to earn 10 CPD hours, split evenly between EA and RP. This CPD allocation includes reading time for the Focus articles.

MO companion activity

The MO companion activity assists you to implement and evaluate changes in your practice in line with the guidance provided in a specific article in this issue of *AJGP*. Complete the companion activity to earn five MO hours.

Find the **August *AJGP* activities on myCPD Browse** and select the **'Register'** button to access both the Clinical challenge and the MO companion activity.

Self-directed MO options

You can also do self-directed MO CPD related to this issue of *AJGP*.

Choose any topic area from within the issue and undertake a quality improvement activity. This can be done on your own, with a colleague, in a group or perhaps with the assistance of your practice manager or PHN quality improvement team.

This month's editorial explores ways that GPs have been supporting palliative care of patients and circumstances that can make this more difficult. As a team or independently, consider recent patients you have supported with advanced care planning arrangements and how you incorporated palliative care considerations into these conversations.

A simple evaluation might be recorded for several MO hours, while a more comprehensive PDSA approach would provide at least 10 hours of MO CPD. Evaluating and implementing your strategy with five patients could provide at least 10 hours of MO CPD.

Log in to **myCPD Home** for guides and templates to complete your self-directed quality improvement activities and record your MO hours.

AI declaration: The Editors advise that artificial intelligence (AI)-assisted technology was used in the writing and/or editing of the August 2025 *AJGP* Clinical challenge and accept full responsibility for all content.

August 2025 Multiple-choice questions

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

CASE 1

Your long-term patient has recently been diagnosed with a terminal illness. You have read this issue of *AJGP* to improve your understanding of some core concepts in palliative care.

QUESTION 1

Which of the following antidepressants results in minimal CYP2D6 inhibition and is consequently recommended for patients with advanced cancer who are taking tamoxifen?

A. Fluoxetine
B. Paroxetine
C. Venlafaxine
D. Sertraline

QUESTION 2

Which of the following antidepressants is available in an oral solution form for use in patients with dysphagia?

A. Escitalopram
B. Sertraline
C. Fluvoxamine
D. Desvenlafaxine

QUESTION 3

Which laxative is recommended as a first-line treatment to prevent hepatic encephalopathy for patients with cancer and cirrhosis receiving palliative care?

A. Polyethylene glycol
B. Lactulose
C. Bisacodyl
D. Docusate

QUESTION 4

In which situation should methylnaltrexone be avoided in patients with opioid-induced constipation receiving palliative care?

A. Patients with renal impairment
B. Patients with bowel obstruction
C. Patients with hepatic encephalopathy
D. Patients with neutropaenia

QUESTION 5

Which chemotherapy agent is prominently noted for contributing to hyperglycaemia and worsening diabetic neuropathy in patients with type 2 diabetes mellitus (T2DM)?

A. Pembrolizumab
B. 5-Fluorouracil
C. Everolimus
D. Nivolumab

Continued on page 2.

QUESTION 6

Which medication should be used cautiously in patients with T2DM receiving palliative care because of the risk of euglycaemic ketoacidosis?

- **A.** Metformin
- **B.** Sulfonylureas
- **C.** Sodium-glucose cotransporter-2 (SGLT2) inhibitors
- **D.** Dipeptidyl peptidase-4 (DPP-4) inhibitors

QUESTION 7

Which non-pharmacological intervention has evidence for decreasing breathlessness in patients without hypoxia who are receiving palliative care?

- **A.** Oxygen therapy
- **B.** Wheeled walkers
- **C.** Walking sticks
- **D.** Chest wall vibration

QUESTION 8

Why are benzodiazepines not recommended for managing breathlessness itself in patients receiving palliative care?

- **A.** They increase the risk of respiratory depression
- **B.** They lack evidence for direct relief of breathlessness
- **C.** They are contraindicated in patients with lung cancer
- **D.** They cause significant hepatotoxicity

QUESTION 9

Why might oxycodone–naloxone modified-release tablets fail to provide adequate pain relief in some patients receiving palliative care?

- **A.** High first-pass metabolism of oxycodone
- **B.** Variable naloxone bioavailability
- **C.** Lack of opioid receptor affinity
- **D.** Rapid clearance of naloxone

QUESTION 10

Which opioid is best suited to a patient receiving palliative care with co-occurring stage 5 chronic kidney disease?

- **A.** Morphine
- **B.** Fentanyl
- **C.** Tramadol
- **D.** Hydromorphone

August 2025 Short answer questions

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

CASE 1

Your long-term patient has recently been diagnosed with a terminal illness. You have read this issue of *AJGP* to improve your understanding of some core concepts in palliative care.

QUESTION 1

In a patient receiving palliative care who also has depression, when should a referral to a psychiatrist be considered?

QUESTION 2

What are some common reasons for patients to wish to hasten their deaths?

QUESTION 3

Why are bulking agents not recommended for managing constipation in patients receiving palliative care?

QUESTION 4

Describe the role of methylnaltrexone in managing opioid-induced constipation in patients receiving palliative care, its mechanism of action and key contraindications.

QUESTION 5

Why is glycated haemoglobin (HbA1c) not recommended for monitoring glycaemic control in patients with advanced cancer receiving palliative care?

QUESTION 6

How can C-peptide levels be used to guide insulin management in a patient with type 2 diabetes mellitus (T2DM) who is receiving palliative care?

QUESTION 7

Explain why benzodiazepines are not recommended for the management of breathlessness itself in patients receiving palliative care.

QUESTION 8

Outline some key components of a breathlessness management plan for a patient receiving palliative care.

QUESTION 9

Why should equianalgesic tables be used cautiously when rotating opioids in patients receiving palliative care, and what is a recommended practice to mitigate risks?

QUESTION 10

Describe some important practice points when prescribing orally disintegrating fentanyl tablets.

July 2025 Multiple-choice question answers

ANSWER 1: E

The most appropriate next step in confirming a diagnosis of sudden sensorineural hearing loss (SSNHL) is tuning fork tests, followed by urgent pure-tone audiometry.

ANSWER 2: E

The most appropriate initial management of SSNHL is to refer urgently to an ear, nose and throat (ENT) specialist and initiate high-dose oral corticosteroids within the treatment window if there are no contraindications. Intratympanic corticosteroids may be initiated by the ENT specialist if there are contraindications to oral therapy.

ANSWER 3: D

Sixth nerve palsy related to giant cell arteritis (GCA) is often preceded by systemic symptoms such as headache, fever, weight loss and jaw claudication. The presence of asymmetric temporal artery pulses suggests large-vessel vasculitis, a hallmark of GCA.

ANSWER 4: C

Patients with ocular involvement (eg diplopia or vision loss) will usually be treated with immediate intravenous (IV) corticosteroids (typically IV methylprednisolone 500–1000 mg daily for 3–5 days) to prevent irreversible visual deterioration. This is followed by a prolonged tapering course of oral prednisolone. This treatment would be in conjunction with urgent referral to an ophthalmologist and an expectation of a temporal artery biopsy within one week of commencing steroids.

ANSWER 5: D

The Focus article by Singh et al supports early initiation of levodopa in probable Parkinson's disease when symptoms impair function and quality of life (QoL), especially when there are long delays in specialist access.

ANSWER 6: C

To initiate levodopa, the Focus article by Singh et al recommends starting low and titrating slowly to minimise side effects while optimising symptom control. A typical regimen begins with 50 mg levodopa once daily, increasing gradually to three times daily.

ANSWER 7: A

Bilateral absent ankle jerks have been shown to have high specificity for cauda equina syndrome (CES), making them a crucial part of clinical assessment. Urinary retention can also be a sign of CES, but it can occur as a result of pain alone. Constipation and anal tone assessment are less reliable for distinguishing true CES, as is sexual dysfunction.

ANSWER 8: E

The clinical presentation described suggests a concerning pattern of bilateral radiculopathy, which is a hallmark feature of significant lumbar or sacral nerve root compression, potentially indicating CES. The key features in the scenario are:

- bilateral ankle weakness and diminished ankle jerks: these suggest bilateral involvement of the lumbar/sacral nerve roots, which increases the concern for a compressive pathology affecting multiple nerve roots, a feature commonly associated with CES
- altered sensation in the saddle area: while not definitively diagnostic, altered sensation in the perineal region (the saddle area) is an important clinical finding. Changes in saddle area sensation, when combined with the other symptoms, raise concern for severe radiculopathy or CES.

Given these clinical findings, immediate referral for MRI is essential to rule out CES.

ANSWER 9: B

The positive Hoover's sign occurs when resistance applied to the contralateral leg (in this case, the right leg) leads to resolution of weakness in the affected leg (left leg), which is characteristic of functional weakness. This sign can be seen in functional neurological disorders where the weakness is not due to an identifiable structural or neurological cause. It indicates inconsistency in voluntary movement and can be used to differentiate functional weakness from true motor weakness that would not show such resolution with contralateral movement. Gluteus medius tendinopathy would most likely present with outer thigh or hip pain and would not show this pattern of weakness.

ANSWER 10: B

Functional overlay refers to the coexistence of functional neurological symptoms (eg functional gait disorders or functional seizures) with an underlying neurological condition, such as multiple sclerosis or epilepsy. This means while the patient may have a primary neurological disorder (eg a demyelinating lesion), functional symptoms (such as gait abnormalities) may also arise, complicating the diagnosis and management.
It does not imply that psychological factors alone are responsible or that functional symptoms are exclusive of structural pathology.

July 2025 Short answer question answers

ANSWER 1

Key questions to ask when taking a history from a patient who presents with sudden hearing loss:

- Is one ear affected, or both?
- What is the duration of the hearing loss?
- Has there been a recent respiratory tract infection?
- What was the patient doing at the time of symptom onset (eg diving, flying, swimming, excess noise exposure)?
- Are there any associated symptoms (tinnitus, vertigo, otalgia, otorrhoea, aural fullness)?
- Past medical history (eg autoimmune disease, diabetes, migraine, vascular disease)
- Medication history (eg ototoxic drugs such as aminoglycosides, platinum-containing chemotherapy drugs)
- Family history (eg autoimmune disease, otosclerosis)

For more details, refer to Table 2 in the Focus paper 'Sudden onset sensorineural hearing loss: An update' by Soon et al.

ANSWER 2

Using a 512Hz tuning fork, we can use the Weber and Rinne tests in the following way:

Normal hearing

- Weber test: the sound will be heard equally in both ears.
- Rinne test: air conduction will be greater than bone conduction in both ears (a normal result).

Right-sided conductive hearing loss (eg wax impaction in right ear)

Weber test: the sound will be louder in the right ear. We need to now do the Rinne test to determine if the lateralisation is due to a conductive hearing loss in the right ear or a sensorineural loss in the left ear. In the case of a right-sided conductive hearing loss, the Rinne test will reveal that bone conduction is better than air conduction in the right ear. On the left side, the Rinne test will reveal that air conduction is better than bone conduction.

Left-sided conductive hearing loss (eg wax impaction in left ear)
Weber test: the sound will be louder in the left ear. We need to now do the Rinne test to determine if the lateralisation is due to a conductive hearing loss in the left ear or a sensorineural loss in the right ear. In this case, the Rinne test will reveal that bone conduction is better than air conduction in the left ear, and that air conduction is better than bone conduction in the right ear.

Right-sided sensorineural hearing loss (eg SSNHL)
Weber test: the sound will be louder in the left ear. Rinne test: air conduction will be greater than bone conduction in both ears.

Left-sided sensorineural hearing loss (eg SSNHL)
Weber test: the sound will be louder in the right ear. Rinne test: air conduction will be greater than bone conduction in both ears.

ANSWER 3

Distinguishing between these two types of diplopia assists with ascertaining a cause for the diplopia. In binocular diplopia, the diplopia resolves upon closing either eye. In monocular diplopia, the diplopia persists with one eye closed and resolves when the affected eye is covered. Monocular diplopia is usually caused by refractive error or ocular media abnormalities such as cataract. Binocular diplopia is more likely to be due to strabismus, neurological or muscular causes, as in this case.

ANSWER 4

Excluding giant cell arteritis (GCA), the causes of a left sixth nerve palsy in adults include:

- vascular causes, such as stroke, microvascular ischaemia (ie related to diabetes, hypertension, atherosclerosis), aneurysms, carotid-cavernous fistula
- infective causes, such as syphilis, mastoiditis, meningitis, herpes zoster
- neoplastic causes, such as skull-based tumours, infiltrative processes (eg leukaemia)
- congenital causes, such as decompensated childhood strabismus
- autoimmune causes, such as multiple sclerosis, sarcoidosis, vasculitides
- traumatic causes (eg head injury)
- idiopathic causes
- any cause of raised intracranial pressure.

ANSWER 5

Here are three key principles that underpin the recommendation by Singh et al to start a trial of levodopa in primary care when there is delayed access to a neurology specialist.

Firstly, levodopa is generally considered a safe drug, and observational data show that people with Parkinson's disease who receive early dopaminergic medication have significantly better quality of life over the first 18 months than those who remain untreated. Secondly, starting medication when symptoms impair functioning can preserve independence and quality of life. Thirdly, levodopa has a short half-life of 1–3 hours and can be withheld overnight before specialist review so as not to mask the clinical signs. This 'defined off' method is often used in research studies, and the 'long duration effect' of levodopa is unlikely to hinder diagnosis.

ANSWER 6

One levodopa myth is the long-held belief that levodopa is neurotoxic and hastens the progression of Parkinson's disease, which has motivated some physicians and people with Parkinson's disease to postpone treatment despite strong evidence this is incorrect.

Another common myth is that levodopa's benefits decrease over time and should be 'saved' for later stages, but this is unfounded, and the apparent reduced efficacy simply reflects Parkinson's disease progression. Additionally, delaying levodopa treatment does not reduce motor fluctuations such as dyskinesias. A large body of literature confirms that the decision to initiate levodopa should be driven by factors such as clinical need, patient preferences, functional disability and quality of life impairments.

Concerns also still exist around the possibility of the general practitioner misdiagnosing Parkinson's disease and inadvertently giving levodopa to someone who has another type of Parkinsonism. Even in this setting, the risks associated remain low, and a lack of response to levodopa might help differentiate Parkinson's disease from, for example, vascular Parkinsonism, drug-induced Parkinsonism and rarer causes of atypical degenerative Parkinsonism. In fact, levodopa therapy may even benefit a subset of patients with dementia with Lewy bodies. This, along with the lack of other specific treatments for these conditions, further justifies an early pragmatic trial.

ANSWER 7

The assessment of anal tone is notoriously unreliable, with sensitivity and specificity each approximately 50%. International consensus recommends against its performance in the primary care setting.

As an alternative, assessment of pinprick and light touch sensory modalities in the 'saddle region' (best described of as the parts of the genital and perineal region in contact with a bicycle seat/saddle) can be performed. There is some limited evidence that this might have discriminatory value, is less invasive and allows assessment of the 'anal wink' reflex (the reflexive contraction of the anus in response to painful stimulation of the adjacent skin).

ANSWER 8

A structured outline of guidelines for general practice registrars to ensure timely investigation and appropriate referral of patients with suspected CES is as follows.

- Identify red flags in the history: prioritise symptoms such as bilateral radicular pain, progressive lower limb weakness, saddle anaesthesia, urinary retention (especially without pain as an alternative cause).
- Perform a focused examination: assess lower limb strength, reflexes (especially ankle jerks) and sensory loss in the saddle region using light touch and pinprick. Anal tone assessment is not recommended in primary care.

- Differentiate from common mimics: consider alternative explanations such as opiate-induced constipation, pain-related urinary hesitancy or pre-existing neurological conditions.
- Urgent MRI and referral: if CES is suspected, immediately discuss with your general practitioner supervisor and arrange urgent MRI, as a CT scan is not sufficiently sensitive. This may involve a referral to the local emergency department where the MRI can be performed and reviewed urgently, and/or an urgent discussion with the neurosurgical registrar on call at the closest hospital.

ANSWER 9

Some physical examination manoeuvres and findings supportive of functional gait disorder include the following:

- Dual task while walking: improvement in baseline gait while distracted.
- Tandem gait: pronounced side-to-side wobbling/windmill-like movements of arms without loss of balance. Improvement in baseline gait.
- Walking backwards: significant improvement of gait abnormality.

For a more detailed answer, refer to Table 2 in the Focus paper 'A false dichotomy: Functional gait overlay in neurological disorders' by Thomson et al.

ANSWER 10

Five management principles that registrars could include when they are developing a treatment plan for a patient with a functional neurological disorder are:

- engaging patients in their treatment
- explaining the diagnosis of a functional neurological disorder clearly using the principles of inclusion
- treating any co-existing conditions
- formulating an individualised management plan
- considering the limited role of pharmacotherapy.

For a more detailed answer, refer to Box 1 in the Focus paper 'A false dichotomy: Functional gait overlay in neurological disorders' by Thomson et al.

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