

Questions for this month's clinical challenge are based on articles in this issue. The clinical challenge is endorsed by the RACGP Quality Improvement and Continuing Professional Development (QI&CPD) program and has been allocated 4 Category 2 points (Activity ID:50371). Answers to this clinical challenge are available immediately following successful completion online at http://gplearning.racgp.org.au. Clinical challenge quizzes may be completed at any time throughout the 2014–16 triennium; therefore, the previous months' answers are not published.

Each of the questions or incomplete statements below is followed by four or five suggested answers or completions. Select the most appropriate statement as your answer.



Clinical challenge

Case 1

Marcus, 34 years of age, works as an office manager and presents with nasal congestion since he woke up this morning. He is particularly concerned that he could not smell this morning's coffee as well as he usually does. You suspect Marcus might be suffering from acute rhinosinusitis.

Question 1

Which one of the following symptoms best indicate that a patient has bacterial rhinonsinusistis?

- A. Severe unilateral facial pain
- B. Profuse nasal discharge
- C. Bilateral facial pressure
- D. Nasal muscosa swelling
- E. Nasal obstruction

You examine Marcus and make a diagnosis of viral rhinosinusitis. He expresses concern because a co-worker's child was recently hospitalised after a seemingly minor 'cold with runny nose'.

Question 2

Which one of the following is NOT a red flag symptom in rhinosinusitis?

- A. Neck stiffness
- B. Painful opthalmoplegia
- C. Frontal swelling
- D. Purulent nasal discharge
- E. Photophobia

Marcus had a full recovery from his illness. Two months later, he started to develop bouts of rhinorrhea, nasal congestion, lacrimation and facial pain. Each bout would last two to four days and then spontaneously resolve before recurring seven to 14 days later. He attributes these symptoms to the 'pollens' in his new neighbourhood.

Question 3

Which one of the following symptoms are most concerning?

- A. Rhinorrhea
- B. Sneezing
- C. Lacrimation
- D. Facial pain

Case 2

Henry, a previously well, retired musician, 70 years of age, presents with six months of declining hearing loss. He has also noticed a buzzing in his ears at times, most noticeable at night. Henry requests for a referral for a hearing aid.

Question 4

Which one of the following should you do first?

- A. Arrange for community audiology
- B. Perform tuning fork assessment
- C. Write a referral to Australian Hearing
- D. Order a gadolinium-enhanced MRI

Following audiometry, Henry is diagnosed with sensorineural hearing loss, worse on the right side.

Question 5

Which one of the following is the most common cause of sensorineural hearing loss in the elderly?

- A. Chronic noise exposure
- B. Age-related cochlea changes
- C. Vascular insufficiency
- D. Cerumen (wax) impaction
- E. Chronic childhood ear infections

Henry presents after being fitted with behind-the-ear hearing aids and reports that he does not think his hearing has improved. He asks whether he should try a different brand or newer technology.

Question 6

When compared to traditional hearing aids, cochlear technology:

- A. provides a similar degree of amplification
- B. produces a more natural sound around electronics
- C. produces less extraneous noise in crowds
- D. improves severe loss of speech discrimination.

Question 7

Which one of the following findings indicates that a patient is a candidate for cochlear implant?

- A. Severe sensorineural hearing loss
- B. Bilateral deafness with vertigo
- C. Tinnitus with preserved hearing
- D. Hearing loss due to absent cochlear nerve

Question 8

Which one of the following findings indicates that a patient is a candidate for bone conductive devices?

- A. Recurrent middle ear infections
- B. Single-sided deafness
- C. Congenital otological malformations
- D. Profound hearing loss

Case 3

Patrick, 45 years of age, presents with a deep, hoarse voice. You note that he has recently seen your colleague and was diagnosed with 'wheeze associated with upper respiratory tract infection' and was prescribed inhaled corticosteroids.

Question 9

The best way to examine the quality, pitch and volume of Patrick's voice is to ask him to:

- A. sustain the vowel sound 'ah' for as long as he is able
- B. cough as loud and often as possible
- C. read as loudly as possible from a book
- D. alternate between high pitched and low pitched sounds.

Patrick discloses that his wheezing has resolved despite not taking the steroid inhaler. He has been preparing for a local choir performance next week in which he is singing solo for the first time. You diagnose Patrick with voice overuse in the context of a recent respiratory tract infection.

Question 10

Which one of the following recommendations is the best strategy for Patrick to recover his voice quality prior to his performance?

- A. Prescribe proton pump inhibitors
- B. Vocal fold hydration
- C. Gargling with pineapple juice
- D. Oral steroid prescription

Question 11

Which one of the following is the most suitable management strategy?

- A. Check steroid inhaler technique, ensuring mouth rinsing and gargling
- B. Referral to otolaryngologist for direct visualisation of the vocal cords
- C. Prescribe antifungal medication and reassess steroid inhaler dose
- D. Cease steroid inhaler and prescribe oral prednisolone
- E. Referral to otolaryngologist for work up for red flag oral thrush

Case 4

Meena, a previously well female aged 18 months, presents on Friday morning with her father, Nick. She is crying and resists examination. Nick states that Meena was well last night but has been crying since 6.00 am. He states that his wife is away and he is not sure what to do. You record a fever of 37.6°C, and note a red, bulging left tympanic membrane.

Question 12

Which one of the following management strategies is in keeping with the best available evidence?

- A. Regular fluids and analgesics
- B. Daily clinical review until fever resolved
- C. Education to await resolution of symptoms
- D. Commence oral antibiotics
- E. Commence topical antibiotics

Nick rings back later that day and reports that his mother-in-law would like to take Meena to an emergency department for antibiotics. His motherin-law, born overseas, has a hearing impairment after a similar childhood illness. He reports Meena has finally fallen asleep after a dose of paracetamol.

Question 13

Which one of the following management strategies is in keeping with patient-centred care?

A. Education on potential adverse effects of antibiotics

- B. 'Wait-and-see' prescription of oral antibiotics
- C. Referral letter to local emergency department
- D. Referral letter to a colleague who is working the next day
- E. Reiterate need for regular fluids and analgesics

Case 5

Krystal, a final-year medical student who has been observing your practice over the previous week, has noted various management approaches to acute illness in children. She asks what is known about how general practitioners commonly manage acute otitis media.

Question 14

What does the analyses of Bettering the Evaluation and Care of Health (BEACH) data reveal about GP management of acute otitis media over the last 25 years?

- A. Prescription of antibiotics for children with acute otitis media may occur less often.
- B. Parental preference may not be taken into account in the management of acute otitis media in children.
- C. Prescription of antibiotics for children with acute otitis media may be provided on a 'wait-and-see' basis.
- D. Referral of children with acute otitis media to a paediatric otolaryngologist review may occur more often.