

Clinical challenge



Questions for this month's clinical challenge are based on theme 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, and are available immediately following successful completion online at: www.racgp.org.au/clinicalchallenge.

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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 - Dorothy Spinks

Dorothy is 68 years of age and recently widowed. While attending for a routine blood pressure (BP) check and repeat of her antihypertensive medication, Dorothy mentions that she is concerned her memory is not as good as it used to be. She is worried she will get dementia like her mother did.

Question 1

Risk factors for dementia include all except:

- A. family history of dementia
- B. advancing age
- C. hypertension
- D. low diastolic BP in patients under 75 years of age
- E. diabetes.

Question 2

You consider the possibility that Dorothy may be depressed. Patients with depression:

- A. are more likely to complain of memory difficulties than patients with dementia
- B. are less likely to complain of memory difficulties than patients with dementia
- C. have no difficulty with the activities of daily living
- D. have normal results on cognitive testing
- E. B and D are correct.

Question 3

You score Dorothy on a Geriatric Depression Scale (GDS) questionnaire and a Mini Mental State Examination (MMSE). Her GDS does not indicate depression. She scores 26 out of 30 on her MMSE. Dorothy:

- A. has probable cognitive impairment
- B. has definite cognitive impairment
- C. does not have memory impairment
- D. has normal cognitive function
- E. may have mild cognitive impairment.

Question 4

You discuss the normal cognitive changes of aging with Dorothy. You explain that:

- A. general knowledge and vocabulary deteriorate first
- B. new problem solving mental speed and spatial manipulation skills are preserved the longest
- C. 'fluid' abilities reduce by 15–30 IQ points to between 20 and 70
- D. the effects of cognitive decline are independent of premorbid cognitive ability
- E. in a test of digit recall the average 65 year old will recall 9 digits.

Case 2 - Nick Coustas

Nick Costas, 78 years of age, speaks little English. He comes to see you with his daughter, Sophia and his wife Anna. Sophia tells you that, when Anna was in hospital recently, Nick had difficulty with simple household tasks and Anna confirms that over the past year Nick has been forgetful, withdrawn and doing less and less at home.

Question 1

Nick has no significant past history and takes no medications. Neurological and general examination reveals no abnormalities and his BP is 130/75. His MMSE score is 22/30. He scores 12/30 (in the depressed range) on the GDS. Initial investigations:

- A. are not required as Nick is depressed
- B. should include FBE, ESR, LFTs, calcium, thyroid function, B12, and folate
- C. all in B plus a CT scan of the brain without contrast
- D. all in B and C plus apolipoprotein E
- E. are not required because MMSE is not valid in non-English speakers.

Question 2

Nick's assessment reveals no further abnormalities. You elect in the first instance to treat him with antidepressants and he responds well, with improvement of mood. However, on a repeat MMSE 2 months later, Nick scores 20/30, his clock drawing test is impaired and his family remain concerned that his memory is worsening. You refer Nick to a geriatrician who confirms Alzheimer disease (AD). Important management considerations for Nick and his family include:

- A. trial of cholinesterase inhibitor medication
- B. linking the family to Alzheimer's Australia
- C. discussing enduring power of attorney and future wishes for treatment
- D. carer support
- E. all of the above.

Question 3

Contraindications to cholinesterase inhibiters include all except:

- A. active peptic ulceration
- B. ischaemic heart disease
- C. heart block
- D. bradyarrythmias
- E. none of the above.

Question 4

Common starting doses for drug treatments for AD include:

- A. donepezil 5 mg/day
- B. donezepil 10 mg/day
- C. rivastigmine 6 mg bd
- D. rivastigmine 3 mg bd
- E. galantamine 16 mg prolonged release daily.

Case 3 - Betty Gladbridge

Betty Gladbridge, 76 years of age, is a new patient to your clinic having moved nearer to her daughter after the death of her husband. She attends for repeat prescriptions. She has NIDDM and hypertension and takes metformin, ramipril and metoprolol. She also takes naproxen and glucosamine for arthritic pain and temazepam at night.

Question 1

Betty's medications:

- A. do not increase her risk of falls because she only takes sedatives at night
- B. should all be continued because they are prescribed for legitimate reasons
- C. constitute polypharmacy
- D. should not be changed until you know her better
- E. are unlikely to interact adversely.

Question 2

Risk factors for polypharmacy include:

- A. patient age
- B. treating doctor
- C. comorbidity
- D. A and C
- E. all of the above.

Question 3

Betty's BP is 150/95. She mentions that she gets indigestion most days and asks what you can suggest to help. Of the following, which is the most appropriate initial management:

- A. add another antihypertensive agent to achieve target BP
- B. add omeprazole
- C. stop Betty's naproxen
- D. A and B
- E. all of above.

Question 4

When prescribing for Betty:

- A. there is likely to be good drug trial evidence for women her age
- B. pharmacokinetics and toxicity would be the same as for a younger adult
- C. none of her medications would require 'step down' doses if 'deprescribed'
- D. choose a (usually lower) dose based on trial data if available
- E. changes in hepatic and renal function usually necessitate higher dosing.

Case 4 - Helen Lane

Helen Lane is your practice nurse. Together you are planning the 75+ health assessments for the practice. Having recently read an article about malnutrition in the elderly you consider how best to screen the patients for nutritional depletion.

Question 1

You elect to use a 'rapid screen' on all patients having 75+ health assessments. The nutritional 'rapid screen'

- A. consists of six questions and measures height and weight
- B. predicts malnutrition when the score is greater than 11
- C. excludes malnutrition when the score is greater than 11
- D. is positive if BMI is less than 22kg/m2 and weight loss of 7.5% over 3 months
- E. has equal sensitivity and specificity to the short form of the Mini Nutritional Assessment.

Question 2

You also give Helen a checklist of medications that are associated with under nutrition. Common problems include:

- A. digoxin may cause anorexia and nausea
- B. calcium channel blockers cause constipation
- C. sedatives, opiates and psychotropic agents cause early satiety
- D. bisphosphonates cause diarrhoea
- E. iron supplements cause diarrhoea.

Question 3

Helen has recently assessed Doris and Clive Smythe. Clive is 75 years of age, hemiplegic and quite physically dependent on Doris. However, it is Doris that Helen is most concerned about. Her BMI is 21, she has lost weight and she has bruises on her left arm and left cheek. Doris' problems may signal:

- A. medical illness
- B. psychological illness
- C. abuse
- D. medication effect
- E. all of the above.

Question 4

It transpires that Doris is having difficulty coping with Clive's care, is depressed and is neglecting her own health. She recently fell while trying to lift Clive. The best management option is:

- A. arrange nursing home admission for Clive
- B. treat Doris with antidepressants
- C. arrange a multidisciplinary care plan
- D. arrange 'meals on wheels'
- E. arrange district nursing visits for Clive.