

## MCQs

### Falls

#### Question 1

A 75-year-old woman was admitted following a fall. During an assessment of her fall she complained of recent balance problems and dizziness whenever she stooped to put her shoes on.

Her past medical history comprised hypertension, mild angina and diet controlled diabetes for which she was taking aspirin 75mg daily and amlodipine 10mg daily. She also had osteoarthritis of the knees. On examination, her gait and balance was normal, and there were no focal neurological signs or injuries.

What is the most likely reason for her fall?

- A Benign positional vertigo
- B Cervical spondylosis
- C Mechanical fall
- D Postural hypotension
- E Stroke

#### Question 2

An 80-year-old woman was admitted following a fall. She stated she tripped over a step while entering a shop. On questioning she had fallen twice before, once in town on cobbles and once while taking her bin out.

On examination, she had a low body mass index was wearing bifocals. Her get-up-and-go test was normal. Her visual acuity and fields were normal. The cardiovascular examination and lying and standing blood pressure were also normal.

Routine blood results and 12-lead ECG: normal.

What is the next best step in this situation?

- A Advice to change spectacles
- B Advice to join a Tai Chi class
- C Physiotherapy referral
- D Outpatient DEXA scan
- E Refer to falls clinic

### Question 3

A 75-year-old woman was admitted following a fall. She said she had bent over to put her shoes on, got brief vertigo and lost her balance and fell off the chair. She sustained a Colles' fracture of the right wrist.

Her past medical history comprised hypertension and diet controlled diabetes and she was taking bendroflumethiazide 2.5mg daily. On examination, her gait and balance was normal. Lying and standing blood pressure was normal. Routine blood tests were normal.

What is the recommended treatment in this case?

- A Alendronate
- B Betahistine
- C Metformin
- D Paracetamol
- E Vitamin D and calcium

### Question 4

An 80-year-old woman was admitted following a fall in town. This had happened at least half a dozen times before. Her husband described how they were out shopping when she 'just went down'. She was not injured.

Her past medical history included type 2 diabetes, hypertension and asthma for and she was taking metformin, ramipril, bendroflumethiazide and prn ventolin. There was nothing abnormal to find on clinical examination. Her blood pressure was 130/80 mmHg with no change from lying to standing. The results of blood tests and a 12-lead ECG were normal.

What is the next best step in management?

- A Ambulatory BP monitoring
- B Ambulatory ECG
- C Carotid sinus massage
- D Echocardiogram
- E Tilt test

### Question 5

A 75-year-old woman was admitted following a fall. During an assessment of her fall she complained of balance problems and dizziness whenever she looked upwards.

Her past medical history comprised hypertension, mild angina and diet controlled diabetes for which she was taking aspirin 75mg daily and amlodipine 10mg daily. She also had osteoarthritis of the knees. On examination, her gait and balance and neurological examination was normal and there were no injuries.

What is the recommended management in this case?

- A Betahistine
- B Epley manoeuvre
- C Referral to neurology
- D Referral to thoracic surgery
- E Soft collar of the neck

### Question 6

A 78-year-old man was admitted for overnight observation following a fall during which he had hit his head. On questioning, he stated he had been having problems with his left leg for the last 2 weeks and kept tripping over his own foot. He had attended the Emergency Department about this problem and had a normal ECG, blood tests, and CT scan of the head. He was awaiting a physiotherapy appointment. He had no past medical history and was not taking any regular medication.

On examination, during the get-up-and-go test he appeared to have a mild weakness of his left leg. His plantar response was up-going on the left side and there was no other neurological abnormality. The rest of the clinical examination was normal.

What is the next best step in management?

- A Chest X-ray
- B MRI of the brain
- C Multi-factorial falls assessment (falls clinic)
- D Orthotics referral
- E Vasculitis screen

### Question 7

An 80-year-old man was admitted following a fall. He reported that he stood up quickly to answer the doorbell, then ended up on the floor. His wife saw what happened, she said he 'just went down'. He did not injure himself, but she struggled to help him off the floor so an ambulance was called.

His past medical history comprised type 2 diabetes, hypertension, angina and heart failure for which he was taking metformin, aspirin, ramipril, furosemide, isosorbide mononitrate and doxazosin.

Clinical examination revealed no signs of fluid retention and normal heart sounds. His blood pressure was 110/60 mmHg which fell to 90/60 mmHg within 3 minutes of standing, with mild symptoms of light-headedness.

Investigations:

Haemoglobin	120 g/L (115–165)
MCV	85 fL (80–96)
white cell count	$10.4 \times 10^9/L$ (4.0–11.0)
platelet count	$347 \times 10^9/L$ (150–400)
serum sodium	134 mmol/L (137–144)
serum potassium	4.5 mmol/L (3.5–4.9)
serum urea	7.3 mmol/L (2.5–7.0)
serum creatinine	105 $\mu\text{mol/L}$ (60–110)
eGFR	49 mL/min/1.73 m <sup>2</sup> (>60)
serum glucose	9.3 mmol/L (3.0–6.0)
serum C-reactive protein	<0.5 mg/L (<0.5)
12-lead electrocardiogram	89 beats per minute old left bundle branch block

What is the next best step in management?

- A Ambulatory blood pressure monitoring
- B Ambulatory ECG
- C Carotid sinus massage
- D Echocardiogram
- E Reduction in medication

## **Answers**

Question:

1. A
2. E (NICE guideline: multi-factorial assessment required)
3. A (fragility fracture in 75-yr-old woman)
4. C (in reality tilt test and CSM in a falls clinic, but NICE-syncope-C)
5. B
6. B (make a medical diagnosis!)
7. E