



Certificate in Geriatric Medicine

Knowledge-based Assessment Sample Questions

Please note that the following Certificate in Geriatric Medicine (CGM) knowledge-based assessment (KBA) sample questions are designed to provide an insight into the structure of questions in the CGM KBA, and to help candidates familiarise themselves with how questions are presented in a question paper.

Questions in this document have previously appeared in KBAs but have now been retired from the live question bank. Publishing of questions as a sample should not be seen as an indicator as to the content that will appear in forthcoming CGM KBAs.

1. An 82-year-old woman with a prosthetic mitral valve was admitted with aphasia. She was taking warfarin 10 mg daily. A CT scan of head showed a small left parietal bleed. Her INR was 3.6.

Which is the most appropriate next step in management?

- A. continue warfarin, give dried prothrombin complex and start low-molecular-weight heparin
- B. stop warfarin and give dried prothrombin complex
- C. stop warfarin and give vitamin K
- D. stop warfarin and give vitamin K and dried prothrombin complex
- E. stop warfarin, give vitamin K and dried prothrombin complex and start low-molecular-weight heparin

Answer: D

2. An 85-year-old woman goes to the outpatient clinic for the investigation of anaemia that was detected following a routine blood test. She has rheumatoid arthritis, osteoporosis and COPD. Her medication includes sulfasalazine, calcium and vitamin D supplements, alendronic acid, paracetamol, and salmeterol, budesonide and tiotropium inhalers.

She has conjunctival pallor, a hyperexpanded chest, and rheumatoid deformities of her hands. There is no lymphadenopathy and abdominal examination is normal.

Investigations:

	Results	Reference range
haemoglobin	90 g/L	115–165
MCV	84 fL	80–96
serum iron	13 µmol/L	12–30
serum ferritin	260 µg/L	15–300
serum transferrin	1.8 g/L	2.0–4.0
estimated glomerular filtration rate (MDRD)	66 mL/min/1.73 m ²	>60

Which is the most likely diagnosis?

- A. anaemia of chronic disease
- B. anaemia of renal disease
- C. haemolytic anaemia
- D. iron deficiency anaemia
- E. megaloblastic anaemia

Answer: A

3. Human progeria syndromes are considered to represent a human model of accelerated ageing.

According to recent research, which is the most probable underlying molecular cause?

- A. demethylation of histones leading to increased heterochromatin
- B. early termination of transcription of the LMNA gene
- C. inhibition of farnesyl transferase activity
- D. post-translational removal of a farnesyl group from prelamin A
- E. upgraded cholesterol metabolism pathway

Answer: B

4. In cellular respiration, what statement is most accurate about the tricarboxylic acid (citric acid/Krebs) cycle?

- A. generates adenosine diphosphate
- B. generates hydrogen
- C. occurs in mature red blood cells
- D. requires coenzyme A to function
- E. takes place within cell membrane

Answer: D

5. Warfarin treatment is being advised more frequently to reduce the incidence of stroke in older people with atrial fibrillation.

Which statement about this treatment is correct?

- A. benefits of warfarin therapy decrease with increasing age
- B. CHA₂DS₂-VASc risk score 2 is an indication for warfarin therapy
- C. dual therapy with aspirin and clopidogrel is as effective as warfarin alone
- D. INR should be maintained between 1.5 and 2.0 to reduce haemorrhagic complications
- E. warfarin therapy has a greater risk of haemorrhagic complications than aspirin in those over 75

Answer: B

6. An 82-year-old woman with dementia develops herpes zoster that affects the left thoracic region. It is treated with aciclovir. After 3 weeks, the rash has healed but she complains of severe burning pain in the affected area that is made worse by her clothes rubbing on it.

Which is the most appropriate initial treatment for her pain?

- amitriptyline
- capsaicin patch
- lamotrigine
- levetiracetam
- pregabalin

Answer: E

7. A 90-year-old man complains of gradually worsening back pain. An X-ray of his lumbar and thoracic spine shows spondylosis and two vertebral compression fractures. Investigation for osteoporosis with the aim of starting long-term treatment to reduce the risk of further fractures is recommended.

The patient wants to know whether, at his age, it is worth embarking on treatment that might take 1 year or longer to show any benefit.

Which is the best estimate of his average life expectancy?

- A. 1 year
- B. 2 years
- C. 4 years
- D. 6 years
- E. 8 years

Answer: C

8. A 74-year-old woman attends a follow-up clinic consultation with her consultant geriatrician. She has idiopathic Parkinson's disease for which she has been receiving pharmacological treatment for the past 5 years. She describes an increasing problem with sleeping for prolonged periods throughout the day, despite sleeping well at night. She denies feeling low in mood. Her medication comprises co-beneldopa 250 mg three times daily and selegiline 10 mg once daily.

On examination, mild extrapyramidal features are elicited. Her Epworth Sleepiness Scale score is 18/24 (normal <11). Comprehensive blood screen is normal.

Which is the most appropriate next step in treatment?

- A. dexamfetamine
- B. methylphenidate
- C. mirtazapine
- D. modafinil
- E. ropinirole

Answer: D