



## THE COLLEGES OF MEDICINE OF SOUTH AFRICA

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Sub-specialty Certificate in Geriatric Medicine of the  
College of Physicians of South Africa



28 August 2015

1 Paper only

(3 hours)

*All questions are to be answered. Each question to be answered in a separate book (or books if more than one is required for the one answer)*

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- 1 A 75-year-old woman complains of becoming more forgetful over the previous year. She also needs help to manage her finances and is afraid that she may get lost if she drives outside of her residential area. She also complains that she is having difficulty sleeping and has poor energy levels. Her daughter complains that she is irritable and verbally aggressive when challenged or told that she is repeating herself. On cognitive testing she scores 22/30 on the Folstein's MMSE (Mini-Mental-State-Examination) losing 4 points on day and date, 3 on delayed recall and 1 on repetition of the phrase. Planning is reasonable on CLOX, there is no perseveration and phonemic and category fluencies are both 9 in 60 seconds. Physical examination is unremarkable
- Does this woman meet the diagnostic and statistical manual of mental disorders (DSM) IV or V criteria for dementia? Explain how you interpret the information provided to fulfil the criteria for a dementia syndrome. (7)
  - What is the most likely cause of dementia in this patient? Explain how you used the information provided to make the diagnosis. (10)
  - Given the information provided, what are the problems which need to be managed? Describe in detail the pharmacological and non-pharmacological management that you would recommend for this patient. (13)
- [30]

- 2 An 87-year-old man has been living on his own following his wife's death one year ago. His daughter asks you to review him because she is concerned about his health and safety. His medical history includes hypertension, atrial fibrillation, degenerative joint disease, intermittent urge incontinence, peripheral oedema, early dementia and instability with falls. There has been no definite pattern to his falls; one time he complained of feeling light headed, another time he slipped in the bathroom at night and one time he slipped on a rug during the day. Neighbours report that of late they have not seen him walk to the local grocery shop as he previously did. His bag of medications include warfarin, captopril, nifedipine, furosemide, Slow K, digoxin, indomethacin, amitriptyline and chlorpheniramine. Cardio-respiratory examination, including an ECG, is normal. His blood pressure is 138/84mmHg without postural drop. He has osteoarthritic changes of the knees and hands, trace bilateral ankle oedema and power in lower limbs seems normal. He has a depressed affect, a Folstein's MMSE score of 25/30 and a Geriatric depression scale short form score of 10. His daughter adds that he had one episode of atrial fibrillation 15 years ago during hospitalisation for a cholecystectomy. Briefly discuss:
- The current medications considered potentially inappropriate for use in this patient and factors that might be exacerbating or precipitating some of the patient's presenting problems. (10)
  - What other assessments would you carry out and recommend in this patient? (10)
  - From the brief history and clinical findings, what future management is required in this patient? (10)
- [30]
- 3 You are asked to assess an 83-year-old woman living in her own home. She has had 3 falls in the past 12 months, one of which resulted in a fracture of the proximal humerus, which was treated conservatively. Her medical history includes hypertension, hypothyroidism and urinary frequency with occasional incontinence
- Describe your approach to the assessment of osteoporosis in this patient including appropriate further clinical assessment, radiological and laboratory investigation. (15)
  - Give a detailed overview of the approach to management aimed at preventing further fractures. (15)
- [30]
- 4 You are asked to lead the multidisciplinary team management of an 82-year-old lady in the intensive care unit. She is admitted with bowel obstruction. Prior to this she was a fully independent community dwelling resident, and the primary carer to her older husband who suffers from moderate dementia. The couple usually resides in a cottage on the property of their daughter. She was known to have hypertension managed with indapamide and perindopril. At the time of initial geriatric assessment she is day 2 post emergency surgery, which was carried out after being transferred from another facility where she had spent two weeks before referral. Provisional histology and radiology shows a T3 N1 M0 adenocarcinoma of her sigmoid colon with complete resection. Post-operative complications evident are: hypoactive delirium, atelectasis, and an ileus with a viable new colostomy stoma
- In the context of a very well-resourced tertiary multidisciplinary team setting identify/specify all the specific team members (both medical and allied health) that you could be working with and briefly list/identify specific management/therapeutic roles each would have. For example: Nursing staff – mobilisation, communication, delirium protocol care, therapies such as oxygen, medications, fluids, and care of intravenous access. (13)

- b) The day after your initial assessment, your patient develops atrial fibrillation with a rapid ventricular response rate of 120-130/minute. Discuss how pathophysiological changes associated with the ageing cardiovascular system in this patient with chronic hypertension, as well as additional likely acute precipitants from her peri-operative state, contribute to her development of this arrhythmia. (7)
  - c) Briefly discuss important safety monitoring and age-related prescriber issues relevant to the chronic clinical use of amiodarone in this patient. (5)
  - d) Briefly discuss the advantages and disadvantages of the new oral anticoagulants versus traditional warfarin anticoagulation for chronic thrombo-prophylaxis against cardioembolic stroke in this older lady. (5)
- [30]