



THE COLLEGES OF MEDICINE OF SOUTH AFRICA

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Examination for the Subspecialty Certificate in Rheumatology of the
College of Physicians of South Africa



27 February 2020

Paper 1

(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)

- 1 A 24-year-old man is referred to you with fever, rash, arthritis, pericardial effusion and elevated liver transaminases. You make the diagnosis of adult onset Still's disease and initiate high doses of glucocorticoids. Within three days the patient shows a dramatic response.
- a) How do glucocorticoids reduce inflammation? An annotated drawing/s are acceptable. (10)
- b) Describe the various preparations available and write brief notes on the indications, advantages and strengths of each. You may wish to draw a table to present your answer. (5)
[15]
- 2 The CEO of your hospital asks you to establish an osteoporosis screening and treatment programme in the tertiary hospital in South Africa. Describe your plan, including details of the following, Tables, lists or algorithms are encouraged
- a) Screening. (5)
- b) Diagnosis and investigations. (5)
- c) And management of osteoporosis. (5)
[15]
- 3 Discuss mycophenolate mofetil under the following headings
- a) Mechanism of action. (6)
- b) Important drug interactions. (3)
- c) Adverse reactions. (3)
- d) Indications in rheumatic diseases. (3)
[15]
- 4 A 43-year-old man with psoriasis presents with right heel pain and a swollen wrist. X-rays of his feet shows a calcaneal spur. Discuss the molecular and cellular characteristics of
- a) Synovitis. (5)
- b) Entesis. (5)
- c) And bone formation in psoriatic arthritis. (5)
[15]

- 5 A 63-year-old man with long-standing hypertension on haemodialysis presents after a fall. X-rays shows a fracture of the right femur and calcification of the iliofemoral arteries. Discuss the bone and vascular manifestations of chronic renal failure and dialysis. [15]
- 6 A 23-year-old woman, with systemic lupus erythematosus previously in remission presents with psychosis. Discuss the immunopathogenic mechanisms of her presentation. [15]
- 7 A 32-year-old previously well man presents with a one month history of left sided arm pain, recurrent syncopal episodes and claudication pain in his legs. A diagnosis of Takayasu's arteritis is made. Answer the following questions
- a) List the classification criteria. (3)
 - b) Discuss the types of Takayasu's arteritis based on angiographic studies. (3)
 - c) Discuss the natural history of this condition. (3)
 - d) Discuss how you would assess disease activity. (3)
 - e) Discuss the role of biological therapy in Takayasu's arthritis. (3)
- [15]
- 8 Discuss the features of gout and advantages and limitations of imaging modalities such as
- a) Conventional x-rays. (6)
 - b) Ultrasonography. (6)
 - c) DECT scan. (3)
- [15]
- 9
- a) Write short notes on systemic sclerosis (SSc) mimics and elaborate on the differences and similarities with SSc. (12)
 - b) Discuss the use and challenges of using the modified Rodnan Skin Score (MRSS) as well predictors of worsening MRSS in diffuse SSc. (3)
- [15]