



THE COLLEGES OF MEDICINE OF SOUTH AFRICA

Incorporated Association not for gain  
Reg No 1955/000003/08

Examination for the Subspecialty Certificate in Nephrology of the  
College of Paediatricians of South Africa

21 February 2019

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)*

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- 1 A child presents with metabolic acidosis and you wish to evaluate the patient for a possible renal tubular acidosis. How would you evaluate this child? [25]
  
- 2 A 12-year-old female is referred to you by her GP with hypertension. On clinical examination, she is noted to be wasted and stunted. Her blood pressure is 180/120. Discuss childhood hypertension under the following headings
  - a) Definition. (8)
  - b) Ambulatory blood pressure monitoring. (2)
  - c) Aetiology. (5)
  - d) Assessment (clinical and investigations) and principles of management. (10)[25]
  
- 3 As the Paediatric nephrologist at a tertiary centre, you receive a call from a doctor at a district hospital regarding a 9-year-old male patient who presented 3 days ago with generalised oedema and seizures. The doctor is concerned about the admission serum creatinine of 690 $\mu$ mol/l. On further questioning, the child complained of a sore throat 2 weeks ago. There was no history of diarrhoea. He was previously well
  - a) What further questions would you ask? (5)
  - b) How would you advise the doctor to stabilise the patient before transfer to your centre? (5)
  
  - c) Discuss acute kidney injury (AKI) in childhood using the following headings
    - i) Definition of AKI. (5)
    - ii) The epidemiology of AKI. (5)
    - iii) Management strategies. (5)[25]
  
- 4 An 8-year-old boy is referred to you with enuresis. Describe your approach under the following headings
  - a) Diagnosis. (10)
  - b) Investigations. (5)
  - c) Treatment. (10)[25]



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22 February 2019

Paper 2

(3 hours)

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- 1 a) Write short notes on furosemide, including mechanism of action, indications for use, and side effects. (7)  
b) Name 3 tests commonly used in nephrology which may be abnormal after administration of furosemide. (3)  
[10]
- 2 Discuss possible strategies to prevent peritoneal dialysis catheter-associated peritonitis. [10]
- 3 List the contra-indications to do a percutaneous renal biopsy. [10]
- 4 Antenatal ultrasounds are becoming more common even in low income settings. How would you approach a patient with antenatal hydronephrosis? [10]
- 5 Amphotericin B is a nephrotoxic drug. Discuss it under the following headings  
a) Incidence. (3)  
b) Pathogenesis. (3)  
c) Prevention of toxicity. (4)  
[10]
- 6 How would you prevent and treat Tumour Lysis Syndrome? [10]
- 7 a) What are the indications for acute dialysis? (5)  
b) What factors would help you decide what modality to choose? (5)  
[10]
- 8 You have a 5-year-old child who has been diagnosed with post-transplant lymphoproliferative disease. Briefly outline your management steps. [10]
- 9 You have a 10-year-old boy who has end stage renal failure. It has been decided that he is not for further renal replacement therapy. What chronic renal failure meds would you continue and why? What other medications are suitable for symptom relief and why would you use those specific medicines? [10]
- 10 Beauchamp and Childress articulated 4 principles of bioethics: autonomy, beneficence, non-maleficence, and justice. Discuss these principles in its application to renal replacement therapy in South Africa. [10]