

UNIVERSITY OF ESWATINI
FACULTY OF HEALTH SCIENCES
FINAL EXAMINATION NOVEMBER 2021

TITLE OF COURSE: PERITONEAL DIALYSIS

COURSE CODE: GNS 470

TIME ALLOWED: 2 HOURS

PAGES:

MARKS: 75

INSTRUCTIONS:

1. ASSURE THAT YOU ARE WRITING THE EXAM FOR THE COURSE IN WHICH YOU ARE ENROLLED.
2. ANSWER ALL QUESTIONS
3. START EACH QUESTION ON A NEW PAGE.
4. WRITE LEGIBLY.

THIS PAPER IS NOT TO BE OPENED UNTIL THE INVIGILATOR HAS GRANTED PERMISSION.

QUESTION 1

Mr Adams is a 42-year-old fitness coach who was referred to the renal clinic over a year ago for persistent hematuria and declining kidney function. At that time a kidney biopsy was done which revealed IgA nephropathy with extensive scarring of both kidneys. He subsequently progressed to end-stage- kidney failure and comes to you for advice. He settles for peritoneal dialysis (PD) after counselling

- 1.1. Discuss the advantages of PD compared to hemodialysis. (4)
- 1.2. Describe the contraindications to PD that you will exclude in Mr Adams. (6)
- 1.3. Different the various methods of peritoneal catheter implantation. (5)
- 1.4. Explain how you will prepare Mr Adams for Tenckhoff catheter insertion. (10)

(TOTAL = 25 MARKS)

QUESTION 2

Mrs Mvelase attends the monthly PD clinic and reports to you that she has noticed her legs were becoming increasingly swollen. In the six (6) months she has been on PD, her ultrafiltration volume has been adequate until the last two (2) weeks where his UF volume was gradually reducing. She reports good urine output and has been compliant with all her medications and diuretics. She denies constipation and has no abdominal pain.

- 2.1. Describe the physiological basis of solute transport and water transport during peritoneal dialysis. (6)
- 2.2. Identify the test used to determine peritoneal solute transporter status. (2)
- 2.3 Explain how the test (in 2.2) is performed in the clinical setting. (10)
- 2.4. State how the findings in this test (in 2.2) will assist in managing Mrs Mvelase.(7)

(TOTAL = 25 MARKS)

QUESTION 3

Mr Ngcamphalala has been on PD for the past 10 months without major complications. He presents to casualty after developing nausea and vomiting and abdominal pain for the past two (2) days. He noted that his peritoneal dialysate was cloudy the previous day and this morning it has become blood stained. During evaluation he is noted to have a very low BP of 85/ 46 mmHg and a temperature of 39.5⁰ C.

- 3.1. Based on the given data, what is the likely diagnosis for Mr Ngcamphalala? (2)
- 3.2. Identify the risk factors for this condition (in 3.1). (5)
- 3.3. Explain how the diagnosis of this condition (in 3.1). is made. (5)
- 3.4. Describe the immediate and short term management of Mr Ngcamphalala. (10)
- 3.5. When will you consider switching this patient to hemodialysis? (3)

(TOTAL = 25 MARKS)