



University of Fort Hare
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UNIVERSITY OF FORT HARE

PGD IN THE CLINICAL MANAGEMENT OF HIV/AIDS

EXAM PAPER
November, 2019

Time: 2 Hours Marks: Section 1 = 40 marks, Section 2 = 30 Total = 70

Subject: Basic physical assessment, diagnosis, treatment and care of HIV/AIDS client

Code: NAT 401E

Internal Examiners:

Dr. N. Mangi
Mrs. H. Bunt - UFH

External Examiners:

Dr. J. Taljaard - Stellenbosch University

This paper consists of 7 pages including the cover page

INSTRUCTIONS

- You are expected to answer all questions.
- In Section 1, one mark is allocated per multiple choice questions.
- Answer all multiple choice questions ON THIS QUESTION PAPER.
- In Section 2, one mark is allocated per answer or fact.
- Answer Section 2 in the examination script provided.

SECTION 1

Match the following words or phrases in column 1 with the best choice in column 2. Those in column 2 may be used more than once.

(1 mark per answer)

(10 marks)

COLUMN 1	ANSWER	COLUMN 2
1. Cryptosporidium		a. Condition resulting directly from HIV infection
2. Cryptococcus		b. Stage 2 fungal infection in HIV positive clients
3. Angular cheilitis		c. Common conditions in HIV clients caused by other viruses
4. Nephropathy		d. Commonly causes an IRIS
5. Kaposi's sarcoma		e. Common cause of diarrhoea in HIV positive client
6. Dementia		
7. Microsporidiosis		
8. Liver cirrhosis		
9. Mycobacterium Avium Complex		
10. Oral candidiasis		

Match the following words or phrases in column 1 with the best choice in column 2. Those in column 2 may be used more than once.

(1 mark per answer)

(10 marks)

COLUMN 1	ANSWER	COLUMN 2
11. May be used to treat hepatitis B as well as HIV		a. Dolutegravir
12. Has few side effects but can cause severe skin reactions and hyperpigmentation of palms and soles		b. Lopinavir /ritonavir
13. May cause diarrhoea and dyslipidaemia		c. Emtricitabine
14. May cause diarrhoea and insomnia		d. Tenofovir
15. May cause diarrhoea, nausea and renal insufficiency		e. AZT
16. Is affected by magnesium or aluminium antacids		f. Efavirenz
17. May cause insomnia, central nervous system toxicity		
18. May cause anaemia and lipodystrophy		
19. Has an effect on oral and implantable hormonal contraceptives		
20. May cause osteoporosis if given before puberty		

Choose the best possible answer for each question and circle your choice on this question paper.

(1 mark per answer)

(20 marks)

21. The most common side effects associated with dolutegravir are
- Weight change, lipodystrophy, nausea and vomiting
 - Nausea, diarrhoea, insomnia, headache and weight gain
 - Diarrhoea, nausea, vomiting, insomnia and bad dreams
 - Headache, dizziness, nausea, insomnia and peripheral neuropathy
22. Thabo tests HIV positive and is started on TLD (TDF 200mg/ FTC 300mg/ DTG 50mg). His first eGFR result is 65ml/min.
- This result is within normal range
 - Thabo is in renal failure, refer to a specialist immediately
 - Thabo should be switched to AZT, DTG, FTC
 - This result is slightly high, repeat creatinine again in one month
23. Thabo has remained on TLD (TDF 200mg/ FTC 300mg/ DTG 50mg). His first eGFR result is 65ml/min and his second result is 55ml/min
- You should refer to a specialist immediately
 - You should switch Thabo to AZT, DTG, FTC
 - You should make a note to investigate further if serum creatinine levels have increased in the next 3 months
 - You should test creatinine levels again in one month
24. Zola has been on Metformin 500mg daily and now she is diagnosed with HIV and you want to start her on TLD (TDF 200mg/ FTC 300mg/ DTG 50mg).
- You should double her dose of DTG so she takes 50mg 12 hourly
 - DTG increases the action of Metformin so its dose should be decreased
 - Change the client to insulin as the dose of Metformin will be too high
 - The dose of Metformin should be doubled
25. Your client has been on FDC (TDF300mg/FTC200mg/EFV600mg) for the past 2 years and is now diagnosed with hypertension, what would change in her management?
- Monitor blood pressure monthly and creatinine 3 monthly
 - Change from Tenofovir as hypertension can also cause renal damage
 - Monitor creatinine monthly
 - Test urine three monthly and creatinine six monthly

26. Your client is on FDC (TDF300mg/FTC200mg/EFV600mg) and has a glomerular filtration rate of 35mL/min. He should
- Continue taking his FDC 24 hourly
 - Stop FDC and take AZT 600mg, Efavirenz 600mg and Lamivudine 300mg 24 hourly
 - Stop FDC and take AZT 600mg, Efavirenz 600mg and Lamivudine 150mg 24hourly
 - Stop FDC and take AZT 300mg, Efavirenz 300mg and Lamivudine 75mg 24 hourly
27. Drugs used to treat HIV and tuberculosis may both cause
- Haemolytic anaemia
 - Diarrhoea
 - Peripheral neuropathy
 - Necrotising ulcerative gingivitis
28. Symptomatic Cryptococcal meningitis is treated with
- IV Fluconazole 800mg and Amphotericin B for 2 weeks followed by oral Fluconazole for 12 months
 - Fluconazole 800mg for 2 weeks then 400mg for 12 months
 - IV Fluconazole for 4 weeks followed by oral for one year
 - IV Amphotericin B for eight to twelve weeks
29. Asymptomatic cryptococcal meningitis is managed with
- IV Amphotericin B for 2 weeks then Fluconazole 400mg for 6 months
 - IV amphotericin B for 4 weeks followed by oral fluconazole for 12 months
 - Fluconazole 800mg for 2 weeks then 400mg for 12 months
 - Fluconazole 400mg for 12 months
30. The UNAIDS 90-90-90 goal means
- 90% of people tested, 90% adherence, 90% prevented
 - 90% of people on ARVs, 90% of people tested, 90% knowing their status
 - 90% of people tested, 90% of HIV positive people on ARVs, 90% of whom are virologically suppressed
 - 90% tested, 90% adherent 90% of the time
31. In South Africa 2018 we have reached targets of
- 90% of people tested, 68% on treatment, 78% virally suppressed
 - 90% of people tested, 78% on treatment, 68% virally suppressed
 - 68% of people tested, 90% on treatment, 78% virally suppressed
 - 78% of people tested, 68% on treatment, 90% virally suppressed

32. If a client just started on Tenofovir + Emtricitabine + Efavirenz
- Conduct a fasting cholesterol and triglycerides at month 3
 - Conduct a Serum creatinine at months 3, 6, 12 and viral load at 6 and 12 months
 - Conduct ALT if client has a rash or symptoms of nausea and jaundice
 - Test viral load and creatinine every 6 months
33. If a client has been on Tenofovir + Lamivudine+ Dolutegravir for nine months
- Conduct a fasting cholesterol and triglycerides now and annually
 - Conduct a Serum creatinine now and annually
 - Conduct viral load now and annually
 - They are not eligible for blood tests now
34. If a client just started on AZT, 3TC, LPV/r
- Test viral load every 6 months and triglycerides at month 3 and annually
 - Conduct ALT if client has a rash or symptoms of nausea and jaundice
 - Test a full blood count at months 3, 6 and 12, viral load at 6 and 12 and triglycerides at 3
 - Conduct a Serum creatinine at months 3, 6, 12 and annually
35. Cotrimoxazole
- Is not safe to use during pregnancy or in combination with TB medication
 - Most common side effect is a maculo-papular rash
 - Should be commenced as prophylaxis for HIV-exposed infants from birth
 - Prophylaxis for HIV positive adults at should be started only at WHO stage 4
36. Cotrimoxazole preventive therapy should be initiated
- To adults or children with HIV infection
 - To HIV positive children or adults in WHO stage 2
 - To HIV positive persons with CD4 <200 cells/ul or child < 5years after PJP infection
 - To all HIV positive persons with a CD4 under 500 c/ul
37. Cotrimoxazole preventive therapy should be stopped when
- HIV positive client has a viral load of undetectable
 - HIV positive client has a CD4 count of > 350 c/ul
 - HIV positive client is clinically stable
 - HIV positive client has a CD4 count of >200c/ul

38. The prevalence of common mental disorders in HIV positive persons is influenced by
- Psychosocial stressors of facing a stigmatized illness
 - Damage to the central nervous system by the anti-retrovirals
 - Frequent opportunistic infections
 - Anti-retrovirals crossing the blood – brain barrier
39. When screening for depression the following questions should be asked
- Are you depressed?
 - Are you eating well?
 - Have you been feeling more tired and more stressed than usual?
 - Do you feel happy?
40. Danger signs that require urgent referral in a client with a skin condition would be
- Shingles where the client has severe pain
 - Purple rash with headache and vomiting or temperature above 38 degrees Celsius
 - Rash with septic pustules
 - Rash with blood pressure over 160/100

Total marks Section 1 = 40

SECTION 2

Answer all questions according to the mark allocation indicated.

41. What are the benefits of prescribing DTG
(1mark per answer) **(5 marks)**
42. Luyanda is a 25-year-old man who has been on TEE (TDF300mg/FTC200mg/EFV600mg) for the past 5 years. His viral load last year was “Undetectable” but this month it is found to be 1350 copies/mL.
- Describe the discussion you would have with him at the next consultation?
(1mark per answer) **(7 marks)**

b. What blood tests would you take in order to monitor this situation? Give time frames and rationale for each.

(1 mark per answer)

(4 marks)

c. At Luyanda's next follow up visit his viral load is 2350 copies/mL. Discuss how you would manage his care, give reasons for each intervention.

(1 mark per answer)

(2 marks)

d. After four weeks, Luyanda returns complaining of diarrhoea and says he does not want to take his ARVs anymore. Discuss how you will manage his care.

(1 mark per answer)

(3 marks)

43. Mandisa was started on TLD last week. When she returned for her baseline blood results, it was found that GeneXpert was positive for TB (sensitive to Rifampicin) and initiated on rifafour according to her weight. Her CD4 count is 70c/ml. Describe how are you going to manage her care, giving rationale for your answers.

(1 mark per answer)

(4 marks)

44. Mandla presented at the clinic with his wife. Mandla is complaining of night sweats, loss of weight and productive cough. He has white patches in his mouth and complains of severe pain when swallowing.

a. Describe your first action in this scenario

(1 mark per answer)

(1 marks)

b. Mandla tested positive for HIV. Discuss Mandla's further care.

(1 mark per answer)

(4 marks)

Total Marks for Section 2 = 30

TOTAL MARKS 40 + 30 = 70

END OF EXAM