



PROGRAM

: BACCALAUREUS TECHNOLOGIAE
PODIATRY

SUBJECT

: CLINICAL STUDIES III THEORY

CODE

: PKSA 311

DATE

: 01 NOVEMBER 2014

TOTAL MARKS

: 178

EXAMINER

: MS. F. CASSIM

MODERATOR

: MR. M. ELS

NUMBER OF PAGES

: 5 PAGES

INSTRUCTIONS

1. PLEASE ANSWER ALL QUESTIONS
 2. WRITE NEATLY AND LEGIBLY.
 3. LEAVE A LINE SPACE BETWEEN QUESTIONS
 4. NUMBER QUESTIONS CLEARLY
 5. MARKS WILL BE ALLOCATED FOR LOGICAL EXPOSITION OF ANSWERS
 6. PLEASE HAND BOTH YOUR QUESTION PAPER AND ANSWER SHEET TO THE INVIGILATOR
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QUESTION ONE

Read the case study below and answer the questions that follow.

A 45 year old female patient presents to the Podiatry Clinic complaining of a burning pain in the medial longitudinal arch (MLA) area. The pain also radiates into the plantar aspect of the feet. At times the pain is described as tingling or numbing. The pain is chronic in nature and has been getting progressively worse. The patient reports no history of trauma or injury. The patient reports that she experienced similar symptoms in her hands. As the patient's feet look very flat on non weight bearing (whilst seated), you ask her to stand on tip toes to determine if the arch forms on semi-weight bearing. It is evident that the patient experiences pain and some discomfort with minimal formation of the MLA. The patient does not have a remarkable medical history except that she has noted for the last six months that her fingers are swollen and stiff in the morning when she wakes up. The patient says that it takes a long time before she is able to move her fingers. The patient has not sought medical treatment for any of her symptoms and relates it to normal aches and pains of nearing the "change of life." The patient has a normal Body Mass Index (BMI), is moderately active, and is a non-smoker. She does report occasional episodes of malaise and fatigue.

- 1.1.1 List possible differential diagnoses of the patients presenting condition? (6)
- 1.1.2 Justify your answer for 1.1.1 above. (6)
- 1.2.1 What systemic pathology could cause the foot discomfort? (3)
- 1.2.2 Justify your answer for 1.2.1 above. (5)
- 1.3 Name the most important anatomical structures to be considered when assessing this patient's foot complaint. (0.5 marks per structure. $10 \times 0.5 = 5$)
- 1.4 Give a detailed description of your assessment of this patient's overall complaint. (10)
- 1.5 The patient mentions that she is "nearing the change of life." Why would such a hallmark be significant in this patient? (4)
- 1.6 In your own words explain the significance of the BMI in such patients. (4)
- 1.7 What diagnostic investigations are you likely to refer the patient for? Provide a clear motivation as to why you have chosen these tests and or modalities. (10)
- 1.8 Describe the related foot and radiological changes you would expect in such patients (refer to the diagnosis in 1.2.1). (25)
- 1.9 Discuss your management plan for this patient. Justify your answer. (15)

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QUESTION TWO

Read the case study below and answer the questions that follow.

A 58 year old female patient presents to the clinic with a plantar ulcer on the left foot as shown in the figure below.



The patient has had suboptimally controlled Diabetes Mellitus (DM) for 13 years. She is currently on oral medication for the DM. The ulcer which has been present for seven months has not healed and according to the patient has become progressively larger. The patient does not recall any incidences of trauma or any other significant history. The patient has been treated at a local clinic for management of the neuropathic mal perforans and despite numerous courses of antibiotics the ulcer has failed to heal.

- 2.1 What would your diagnosis of this condition be? Justify your answer. (4)
- 2.2 What could your alternative diagnoses for this condition as seen in the figure above be?
(0.5 marks each, 10 x 0.5=5)
- 2.3 In order to confirm your diagnosis you may have to refer the patient for various diagnostic investigations. Provide reasons for why you have chosen to refer the patient for these tests. (10)
- 2.4 Describe current best practice methods for the management of neuropathic mal perforans. (8)
- 2.5 In your opinion, despite numerous courses of antibiotics, why has the ulcer failed to heal? (6)

- 2.6 Describe the ultimate management of this patient's presenting condition. (5)
- 2.7 What complications should the patient be made aware of? (3)
- 2.8 In your opinion what is the prognosis of this patient likely to be? (3)

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QUESTION THREE

Read the case study below and answer the questions that follow.

A 40 year old male patient presents to the Podiatry clinic complaining of pain at the posterior aspect of the right heel. The pain has been present for 2 months. The patient is very active and participates in many sports on a social level. He describes the area as tender and says that he experiences pain when he walks long distances or runs uphill. The patient has a history of recurrent ankle sprains. He also experiences stiffness of his ankle and foot when he gets up in the morning. The patient has not sought prior treatment. The patient is unhappy as he has had to stop playing sports. On examination the area around the posterior aspect of the heel is swollen and very tender on palpation. The patient also has difficulty with dorsiflexion of this foot. The patient has a significant limb length discrepancy (LLD); the right leg being 2cm longer than the left leg. The patient's right leg has an abducted gait with significant medial column prolapse in both stance and gait.

- 3.1 Based on the case study above, what would your diagnosis be? Justify your answer. (4)
- 3.2 In your own words describe the mechanism of injury. (5)
- 3.3 Describe the compensation mechanisms you would expect to see in patient with a LLD? (7)
- 3.4 Discuss your management of this patient's condition. In your answer validate and justify the decisions you have made relating to the management plan. (15)

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Question Four follows on page 5

QUESTION FOUR

With reference to the diagnostic image below:



4.1 Write a detailed report on this image

10

[10]

TOTAL: 180