

SUPPLEMENTARY EXAM PODOPAEDIATRICS HPMB 411



PROGRAM : BACCALAUREUS TECHNOLOGIAE
PODIATRY

SUBJECT : **PODOPAEDIATRICS**

CODE : **HPMB 411**

DATE : SUPPLEMENTARY 2016 EXAMINATION

DURATION : 180 MINUTES

WEIGHT : 50:50

TOTAL MARKS : 177

EXAMINER : MRS G JENKINS

MODERATOR : MRS J CRAWFORD

NUMBER OF PAGES : 7

INSTRUCTIONS :

- ANSWER ALL QUESTIONS
- MARKS WILL BE ALLOCATED FOR A CLEAR AND LOGICAL EXPOSITION OF THE ANSWER
- PLEASE HAND IN ALL QUESTION AND ANSWER PAPERS TO THE INVIGILATOR

QUESTION 1:

A 9-year-old girl presented in the clinic complaining of pain over the lower half of her right leg. The pain had been there for about 8 days. She was limping with the pain. The pain was worse on weight bearing and relieved with rest and painkillers. There was no history of fever or systemic upset. She was not involved in any sport or activities, but her mother did say that she had received a new pair of rollerblades a few weeks previously and she had been trying to perfect her rollerblading. There was no pain experienced in the opposite leg or other joints. There was no known previous history of joint problems. There was no family history of joint pathology.

On examination, she was underweight for her age and height but lower limb alignment was normal, with no limb length discrepancy. There was no swelling or inflammation over the foot, ankle or leg, but there was localised tenderness at the junction of the proximal two-thirds and distal one-third of the right fibula. No soft tissue or bony mass was palpable and ankle and subtalar joint ranges of motion were normal.

You decided to send for an X-Ray.



- 1.1 Provide a diagnosis. (1)
- 1.2 Explain the etiology of your diagnosis. (5)
- 1.3 Suggest a suitable treatment plan for this patient. (4)
- 1.4 Differentiate between the five types of fractures in the Salter Harris Classification. (12)
- 1.5 What is the importance of being able to identify these types of fractures in children? (3)

[Total 25]

QUESTION 2:

A 12 year old boy presents in the clinic with a history of left knee pain which has been there for four months. There is no history of trauma to the knee, but he does play a lot of basketball. He reports that the pain is worse after playing. The patient also says he can feel a "knot" over the anterior aspect of his proximal tibia. On examination the patient had a prominent tibial tubercle which was swollen and tender. The knee did not have an effusion, and there was no joint line tenderness. There was also no tenderness over the patellar tendon. There was full range of motion in the knee, but the patient had hamstring tightness. He also had pain with resisted knee extension. McMurray test was negative. Lachman test was negative. Patellar tracking was normal, and there was no pain with loading of the patella femoral joint.

2.1 List your diagnosis (2)

2.2 Discuss the etiology of this condition (9)

2.3 List the muscles in the two prominent muscle groups that are involved in this condition. (7)

[Total 18]

QUESTION 3:

A five year old male child presents in the clinic with bilateral Pes Cavus.

3.1 List and differentiate between the different types of Pes Cavus. (10)

3.2 Explain how you could evaluate the flexibility of the hindfoot. (8)

[Total 18]

QUESTION 4:

4.1 Discuss how the presentation of hallux valgus in a paediatric patient would differ to hallux valgus in an adult patient. (6)

4.2 List two angles that you could use to aid in your diagnosis of juvenile hallux valgus. Choose one of these angles and provide a description of how you would measure it. (7)

4.3 Discuss the various conservative treatment options available for juvenile hallux valgus other than orthotic treatment. (5)

- 4.4 Discuss why the above forms of conservative treatment are likely to be impractical when treating the paediatric patient. (3)

[Total 21]

QUESTION 5:

- 5.1 Explain the Heuter – Volkmann principle and how it applies to Genu Valgum. (9)

[Total 9]

QUESTION 6:



- 6.1 Study the image above and identify the pathology. (2)
- 6.2 Provide a definition for this pathology. (3)
- 6.3 At what age would you expect this Pathology to manifest itself? (2)
- 6.4 Provide an explanation as to how you would treat this condition. (6)

[Total 13]

QUESTION 7:

A six year old child presents in the UJ clinic, his mother complains that he has an in toeing gait. You suspect that internal tibial torsion is the cause of the gait abnormality.

7.1 Provide a definition for internal tibial torsion. (2)

7.2 Name two tests you could perform on this child to check for Tibial torsion. (2)

7.3 Provide a detailed account of how you are going to perform these two tests. (8)

7.4 If you had to perform a weight bearing examination of this child what key feature would you look for to rule out hip involvement? (1)

[Total 13]

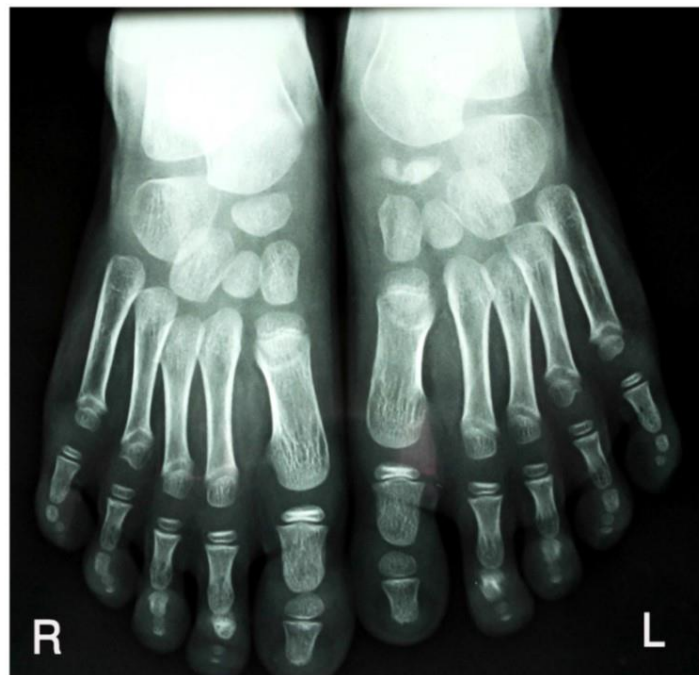
QUESTION 8:

Tommy, a seven year old boy was brought into the paediatric clinic complaining of a severe limp. He has been limping for about a week. He plays soccer about four times a week.

On examination you noticed swelling in the left mid foot which appeared to be red and he told you that it was very painful when you palpated it. He had no symptoms in his right foot. You noted that his gait was supinated.

His mom had been applying an anti inflammatory gel to the area.

His blood counts and inflammatory markers were normal.



8.1 Use the case history provided and the X- Ray and provide a diagnosis. (1)

8.2 Discuss and describe what detailed explanation you would give the parent regarding your diagnosis and the reasons for it having occurred. (11)

8.3 Considering Tommy's symptoms what treatment would you suggest and what would you be hoping to achieve with your treatment? (8)

[Total 20]

QUESTION 9:



A mother brings her 4 year old daughter to see you. Her chief concern is that she has noticed a red rash on her child's left foot and leg which is very itchy. She is concerned as it seems to be spreading. On examination you clearly notice an erythematous, serpiginous rash.

9.1 Study the image above and consider the case history. Provide a diagnosis. (1)

9.2 Describe how this pathology would present. (4)

9.3 Prescribe an appropriate treatment plan for this patient. What other advice could you offer this patient? (4)

9.4 As part of your assessment of a child you are required to perform a dermatological examination.
Provide an explanation of how you would perform this examination on the child. (10)

9.5 During your examination of the above patient you notice a mole on the plantar surface of the right foot. Explain what changes you would advise the mother to look out for. (6)

[Total 25]

QUESTION 10:

Discuss the advantages and disadvantages of physical exercise in children. (15)

Total [15]

GRAND TOTAL: 177 MARKS