Clinical challenge

Case 1 – Shane
Shane, 17 years of age, presents with a right ingrown toenail. He has had multiple presentations with the same problem over the past 6 months, and has not responded to conservative management techniques. You are considering surgical management techniques.

Question 1
Which one of the following risk factors is associated with the development of ingrown toenails?
A. Female gender
B. Age group 26–35 years
C. Isotretinoin use
D. Thinning of the nail plate

Question 2
Which one of the following statements regarding surgical management techniques is correct?
A. A recent large case series reported 96.3% patient satisfaction with the Winograd procedure.
B. Phenol matrixectomy was first described by Boll in the 1800s.
C. The Winograd technique uses chemical ablation to destroy the nail matrix.

Case 2 – Sharon
Sharon, 53 years of age, presents with pain in the inferior portion of her left heel of several months duration. The pain is sharp and aggravated by weight-bearing.

Question 3
Which one of the following structures is a common source of inferior heel pain?
A. Achilles tendon insertion
B. Sinus tarsi
C. Superficial calcaneal bursa
D. Calcaneal fat pad

Question 4
You suspect that Sharon has plantar fasciitis. Which one of the following historical features is commonly associated with plantar fasciitis?
A. Young age
B. Stiffness
C. Night pain
D. Cramping

Question 5
Which one of the following features on physical examination is the most helpful to diagnose plantar fasciitis?
A. Tinel’s sign
B. Calcaneal tuberosity tenderness
C. A positive Simmond’s test
D. Posterior impingement test

Question 6
Which one of the following management options is recommended for plantar fasciitis?
A. Heel raises in shoes
B. Hirudoid/voltaren gel wrap
C. Low height isometric heel raise sustained hold
D. Neural mobilisation

Case 3 – Sam
Sam, 74 years of age, presents with intermittent numbness and tingling in his right foot of several months duration. He has a past medical history of ischaemic heart disease. He is an ex-smoker, drinks alcohol infrequently and is on a number of medications.
**Question 7**
Which one of the following terms best describes his symptoms?
A. Dysaesthesia
B. Hyperalgesia
C. Paraesthesia
D. Allodynia

**Question 8**
Peripheral neuropathy is a well-recognised side effect of which one of the following medications?
A. Aspirin
B. Candesartan
C. Atorvastatin
D. Lercanidipine

**Case 4 – Sophia**
Sophia, 10 years of age, presents with left mid-foot pain of 1 month duration.

**Question 9**
Which one of the following is a chronic overuse condition mostly seen in younger children?
A. Mid-foot osteoarthritis
B. Peroneus longus enthesopathy
C. Kohler’s osteochondrosis
D. Stress fracture at base of fifth metatarsal

**Question 10**
Physical examination reveals tenderness at the lateral aspect of the mid-foot. Which one of the following structures is most likely associated with tenderness in this location?
A. Accessory navicular bone
B. Peroneus longus tendon
C. Base of fifth metatarsal
D. Tibialis posterior tendon

**Question 11**
Considering Sophie’s history and physical examination findings, what is the most likely cause of her mid-foot pain?
A. Accessory cuboid bone
B. Kohler’s osteochondrosis
C. Tibialis anterior enthesopathy
D. Traction apophysitis at the base of the 5th metatarsal

**Question 12**
You suspect that Sophie has traction apophysitis at the base of the fifth metatarsal. Which one of the following is the most appropriate management consideration?
A. Magnetic resonance imaging to confirm diagnosis
B. A CAM walker for more severe cases
C. Orthopaedic referral for consideration of surgical management
D. Early consideration of corticosteroid injection