Clinical challenge

Case 1
Frank, a previously well man, aged 24 years, presents to your practice after sustaining a burn to his right forearm. He was cooking at home and accidentally spilled a pot of boiling water over his arm. Frank immediately ran cold water over the area and drove himself to your practice for assessment. On examination, you note a 5 x 7 cm area of erythematous and blistered skin on the dorsal aspect of his right forearm.

Question 1
In considering which burns dressing to use, it is helpful to consider Jackson's burn wound model. This model includes all of the following zones EXCEPT:
A. coagulation
B. hyperthermia
C. hyperaemia
D. stasis.

Question 2
Which one of the following is not one of the overall aims of modern burn dressings?
A. Prevention of infection
B. Promotion of moist wound healing
C. Reduction in pain
D. Keeping the wounded area immobile

Question 3
You note that there are multiple large blisters on Frank’s forearm and consider whether they should be debrided. Which of the following reasons for blister debridement is the most correct?
A. Blister fluid contains thromboxane A2, which is a powerful vasoconstrictor.
B. Blister skin is alive and can contribute to hypergranulation.
C. Build-up of fluid under the intact blister can put pressure on the underlying dermis.
D. Intact blisters are painful and reduce movement, which results in decreased swelling.

Question 4
In considering the choice of burn dressings, which one of the following statements is the most correct?
A. Hydrocolloids are good for high exudating burns.
B. Foams are not effective at absorbing exudate.
C. Hydrogels are able to donate water to the burn.
D. Alginites are not effective at haemostasis.

Case 2
Fatima is a previously well woman aged 36 years. Six hours earlier, while woodworking at home with a power saw, she felt something fly into her right eye. Since then, she has been experiencing pain and blurred vision in the affected eye.

Question 5
Which one of the following is a key consideration when you test and record Fatima’s vision?
A. Visual acuity is the key examination parameter to document.
B. Snellen charts must be positioned at 3 m distances.
C. Topical anaesthetics must not be instilled prior to assessment.
D. Snellen charts must be positioned at 6 m distances.

Question 6
Which one of the following is not an indication for referral to an ophthalmologist?
A. Loss of symptoms after application of local anaesthetic
B. Incomplete removal
C. Persisting epithelial defect
D. Intraocular foreign body

Case 3
Jessica, 21 years of age, presents to your practice seeking contraceptive advice. She has been on the oral contraceptive pill for three years, but finds it difficult to remember to take it consistently. She is sexually active and in a longstanding, monogamous relationship. Recently, Jessica has been discussing the contraceptive implant (Implanon) with one of her friends and would like further information and advice.
Question 7
Which one of the following is an absolute contraindication to use of Implanon?
A. Breastfeeding  
B. Current breast cancer  
C. Liver cirrhosis  
D. Post-abortion

Question 8
Liver enzyme-inducing medications that can interact with Implanon include all of the following EXCEPT:
A. St John’s wort  
B. carbamazepine  
C. phenytoin  
D. evening primrose oil  
E. ritonavir.

Question 9
Which one of the following statements regarding side effects associated with Implanon is most correct?
A. Local reactions are common.  
B. Dysmenorrhea improves in about 85% of women.  
C. The implant causes significant reduction in bone density.  
D. Acne consistently worsens.

Question 10
Jessica decides that she would like to proceed with Implanon insertion. Tips for the use of local anaesthetic and insertion include all of the following EXCEPT:
A. Mark the insertion point at 8–10 cm above the medical epicondyle.  
B. Avoid insertion along the sulcus between the biceps and triceps.  
C. Pierce the skin at a 45-degree angle, then re-angle to a horizontal position  
D. Hold the applicator at the textured surface to provide improved control.

Case 4
Gerald, 55 years of age, is a regular patient of your rural general practice and has recently been diagnosed with hereditary haemochromatosis. He presents today with further questions regarding his diagnosis and management.

Question 11
Which one of the following is NOT a major cause of morbidity and mortality in symptomatic hereditary haemochromatosis?
A. Cirrhosis  
B. Hepatocellular carcinoma  
C. Diabetes mellitus  
D. Cardiomyopathy  
E. Hypothyroidism

Question 12
Therapeutic venesection is indicated in patients with symptomatic hereditary haemochromatosis when their serum ferritin reaches:
A. 250 µg/L  
B. 500 µg/L  
C. 750 µg/L  
D. 1000 µg/L

Question 13
The aim of therapeutic venesection in patients with symptomatic hereditary haemochromatosis is to decrease their serum ferritin to which one of the following ranges?
A. 0–20 µg/L  
B. 50–100 µg/L  
C. 125–150 µg/L  
D. 200–250 µg/L

Question 14
Once therapeutic venesection is indicated for a patient with symptomatic hereditary haemochromatosis, this needs to be continued for:
A. Six months  
B. Nine months  
C. 12 months  
D. 18 months  
E. Life.