Exam Corner

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The FRCS (Tr & Orth) examination has three components: MCQs, Vivas and Clinical Examination. The Vivas are further divided into four sections comprising Basic Science, Adult Pathology, Hands and Children's Orthopaedics and Trauma. The Clinical Examination section is divided into upper- and lower-limb cases. The aim of this section in the Journal is to focus specifically on the trainees preparing for the exam and to cater to all the sections of the exam every month. The vision is to complete the cycle of all relevant exam topics (as per the syllabus) in four years.

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MCQs – Single Best Answer

1. All of the syndromes below are examples of incomplete spinal cord injury except:
a. Lateral cord syndrome
b. Central cord syndrome
c. Anterior cord syndrome
d Posterior cord syndrome
e. Brown-Sequard syndrome

2. Which of the following nerves could potentially be injured while performing a surgical repair of a ruptured tendo Achillis?
a. Tibial nerve
b. Peroneal nerve
c. Sural nerve
d. Lateral plantar nerve
e. Medial plantar nerve

3. The primary cause for hallux valgus is:
a. Metatarsus primus varus
b. Tarsal-metatarsal arthritis
c. Metatarso-phalangeal arthritis
d. Inappropriate footwear in adulthood
e. Inappropriate footwear in childhood

4. Lateral epicondylitis is associated with a tear in the fibres of which muscle?
a. Extensor carpi radialis longus
b. Extensor carpi radialis brevis
c. Anconeus
d. Brachioradialis
e. Supinator

5. Which is the most common site of entrapment for the posterior interosseous nerve?
a. The second cervical rib
b. Ligament of Struthers
c. The arcade of Frohse
d. Cubital tunnel
e. In the belly of the triceps muscle

Vivas

Adult pathology

A 68-year-old patient presents with a history of pain in both her feet. This is her clinical photograph (Fig. 1).

Fig. 1

1. Describe the clinical photograph.
2. What is your diagnosis?
3. This is the radiograph of the foot of another patient with similar problems (Fig. 2). Describe the abnormality.
4. How would you grade the severity of this condition?
5. What are the options of treatment for the patient in Figure 1?
6. What treatment would you offer her at this stage? Why?
7. What are the technical goals of a first ray osteotomy?

Fig. 2

8. If you did decide to intervene surgically, what possible complications would you warn her about?

Trauma

A 22-year-old student fell off his bicycle and landed on his arm sustaining this injury (Fig. 3).

Fig. 3a

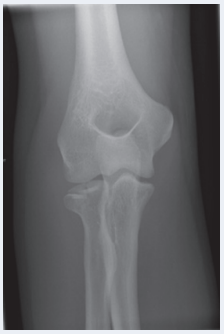

Fig. 3b

1. Describe the abnormality in the radiographs.
2. How would you classify this fracture?
3. How would you treat this patient?
4. Could you provide any evidence to support your answer?
5. What are the indications for surgical intervention in this type of fracture?
6. What is the expected outcome?

Hands

A 62-year-old patient sustained an intra-articular, comminuted fracture of her left distal radius. She underwent volar locking plate fixation. On examination, at six weeks following removal of her plaster cast, she noticed an abnormality in her thumb (Fig. 4).

1. Describe the clinical photograph.
2. What is the diagnosis?

Fig. 4

3. What is the mechanism by which she sustained this injury?
4. How would you manage her at this stage?
5. What are the zones of flexor tendon injuries in the hand?
6. How do flexor tendons in the hand receive nutrition?
7. What are the commonly used techniques for flexor tendon repair?

Children's orthopaedics

1. This child presented with a progressive varus deformity of her right ankle. As an infant she had been in intensive care for treatment of a severe chest infection (Fig. 5). What is the condition and its likely cause?

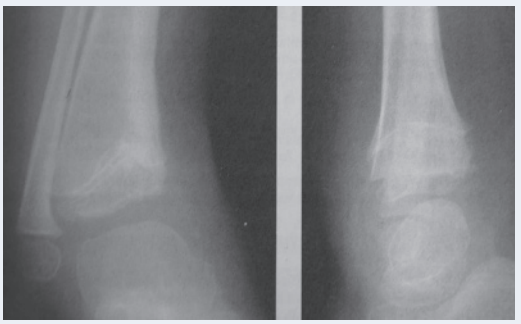

Fig. 5

2. How would you treat it?
3. This is the radiograph of a nine-year-old child who injured his right wrist three weeks earlier (Fig. 6). What is the injury and how would you treat it?

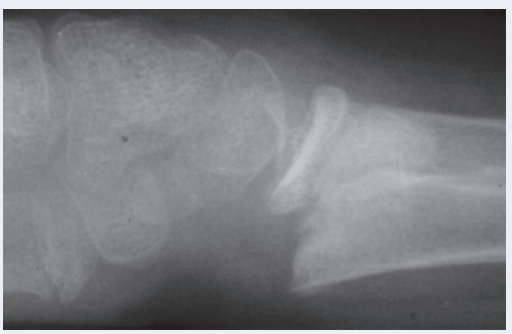

Fig. 6

Basic science

1. What is a radiograph?
2. How does a MRI scan work?
3. What are the contraindications to the use of a MRI scan? Why?
4. How would you measure the bone density of a young woman who has sustained a distal radius fracture?
5. How are images acquired with the use of a CT scan?
6. What are the uses of ultrasound in orthopaedics?

For answers to last month's Exam Corner please visit http://www.jbjs.org.uk/education/examcorner