

## **Intercollegiate Specialty Examination in Trauma & Orthopaedic Surgery**

### **Adult and Pathology**

**Theme:** Spine- Ankylosing Spondylitis

**Scenario:** 30 year old man presents with a history of lower back pain

(Images removed for purposes of publication. Image is presented showing a plain radiograph AP and Lateral of the lumbar spine. The most obvious feature is bilateral sacroiliitis of the sacroiliac joint. Syndesmophytes forming a bamboo spine and the lateral view shows a small erosions at the corners of the vertebral bodies. The areas are surrounded by reactive sclerosis and have been termed the shiny corner sign, or Romanus lesion. All of these features are in keeping with ankylosing spondylitis)

**Introductory question: (e.g. integration of information presented/application of basic principles to the situation described in the scenario/differential diagnosis)**

How do you approach such a patient in your clinic?

**Key points for discussion:**

History and examination findings. Investigations.

Discuss a differential diagnosis ( DISH , other spondyloarthropathies)

Red Flags for lower back pain

**Question 2: (e.g. management, relevant applied pathophysiology, anatomy)**

Radiographic features of ankylosing spondylitis.

Management of spine in ankylosing spondylitis patients

**Key points for discussion:**

Other ways this patient may present to the orthopaedic surgeon.

Investigation and management of these patients when they present following trauma

**Question 3: (complications of management)**

Differences between ankylosing spondylitis and DISH on radiographs.

**Key points for discussion:**

Draw an osteophyte, marginal syndesmophyte, non-marginal syndesmophyte.

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End of Item D32510

## Intercollegiate Specialty Examination in Trauma & Orthopaedic Surgery

### Basic Sciences

**Theme:** Thromboprophylaxis

**Scenario:** You have been asked to write a departmental guideline for thrombo-prophylaxis

(An image of the coagulation will be shown to the candidates.)

**Introductory question: (e.g. integration of information presented/application of basic principles to the situation described in the scenario/differential diagnosis)**

What are the major risk factors you would consider in your guideline?

**Key points for discussion:**

Age, obesity, duration of surgery, lower limb surgery, thrombophilia, bed rest, timing of mobilisation, varicose veins, active malignancy, type of anaesthesia

**Question 2: (e.g. management, relevant applied pathophysiology, anatomy)**

How would you reduce the risks of VTE when doing lower limb arthroplasty?

**Key points for discussion:**

Risk stratification, minimise hospital stay and bed rest, regional anaesthesia, hydration, analgesia, pneumatic compression, chemoprophylaxis – must mention general measures before chemoprophylaxis

**Question 3: (complications of management)**

One of your colleagues tells you that he will only use aspirin for chemoprophylaxis. How would you interpret the current evidence to either support him or persuade him to use an alternative?

**Key points for discussion:**

Flaws in all current trials, baseline risk no longer the same as historical controls, register data does not support historical data, modern peri-op management minimises risk – effects of regional anaesthesia on stress response, enhanced recovery. Current literature.

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End of Item D31881

## Intercollegiate Specialty Examination in Trauma & Orthopaedic Surgery

### Children & Hands

**Theme:** Growth Plate Injury

**Scenario:**

(Images removed for purposes of publication. An image of the cross section of a histological slide of the growth plate is given to the candidate.)

**Introductory question: (e.g. integration of information presented/application of basic principles to the situation described in the scenario/differential diagnosis)**

Describe the anatomy of the growth plate.

Explain how growth occurs and what controls the process.

**Key points for discussion:**

Cell division & death

Blood supply

Oxygen tension

**Question 2: (e.g. management, relevant applied pathophysiology, anatomy)**

Do classification systems of physeal injuries guide treatment and give an indication of prognosis?

**Key points for discussion:**

General truth of correlation but specific examples of injuries that do poorly

**Question 3: (complications of management)**

How to identify growth arrest, predict the progression and plan intervention

**Key points for discussion:**

Recognises the types of growth arrest which lead to angular deformity or leg length discrepancy.

Considers removal of a small growth tether.

Different strategies to deal with deformity, shortening and to balance limbs at the end of skeletal growth

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No exhibits

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End of Item D21490

## Intercollegiate Specialty Examination in Trauma & Orthopaedic Surgery

### Trauma

**Theme:** Complex Distal Tibia fracture

(An image of a complex comminuted displaced fracture of the distal tibia extending into the ankle joint is given to the candidate.)

**Scenario:** Pilon

**Introductory question: (e.g. integration of information presented/application of basic principles to the situation described in the scenario/differential diagnosis)**

How would you classify?

What are the mechanics?

**Key points for discussion:**

Pilon vs Pronation / External Rotation

**Question 2: (e.g. management, relevant applied pathophysiology, anatomy)**

How would you treat?

**Key points for discussion:**

EX-fix (to start)

**Question 3: (complications of management)**

Soft tissue management timing

**Key points for discussion:**

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No exhibits

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## Intercollegiate Specialty Examination in Trauma & Orthopaedic Surgery

### Children & Hands

**Theme:** Dorsal wrist ganglion

**Scenario:** A 21 year old presents with a swelling on the dorsum of the wrist

(Images removed for publication. A photograph of the dorsum of the wrist is shown. The image clearly shows a swelling on the dorsum of the wrist. This lesion is being illuminated by a small torch, the lesion has the classic sign of transillumination.)

**Introductory question: (e.g. integration of information presented/application of basic principles to the situation described in the scenario/differential diagnosis)**

What is the most likely diagnosis and what would you expect to find on clinical examination?

**Key points for discussion:**

Ganglion – findings on examination – soft fluctuant swelling not attached superficially but attached deeply

**Question 2: (e.g. management, relevant applied pathophysiology, anatomy)**

What advice would you give the patient regarding this swelling?

**Key points for discussion:**

Benign. Local defect in joint capsule. Treatment may not prevent recurrence. Options include aspiration +/- steroid injection. Surgery

**Question 3: (complications of management)**

The patient decided she wished to undergo surgical treatment. Describe the surgical approach for the lesion shown in this picture.

**Key points for discussion:**

Incision. Appropriate care of the adjacent structures. Excision of the ganglion. Discussion regarding the defect in the capsule. Post-operative management

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No exhibits

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End of Item D20671