

# Common Orthopaedic Emergencies

## 10 Conditions Every Intern Must Never Miss

### Introduction

Orthopaedic emergencies are conditions in which delayed diagnosis or treatment can lead to permanent disability, limb loss, or death. Every MBBS student and intern should recognize these conditions immediately.

### 1. Compartment Syndrome

Key Features: • Pain out of proportion

- Pain on passive stretch
- Tense swollen compartment

Emergency Treatment: Urgent fasciotomy

### 2. Open Fractures

Key Features: • Fracture communicating with the external environment

Emergency Treatment: • IV antibiotics

- Tetanus prophylaxis
- Urgent debridement

### 3. Septic Arthritis

Key Features: • Hot swollen joint

- Fever
- Severe pain

Emergency Treatment: • Joint aspiration

- IV antibiotics
- Surgical washout when indicated

### 4. Cauda Equina Syndrome

Key Features: • Saddle anesthesia

- Urinary retention
- Bilateral leg symptoms

Emergency Treatment: Urgent MRI and decompression

### 5. Neurovascular Injury

Always assess: • Pulses

- Capillary refill
- Motor function
- Sensation Commonly associated with dislocations and high-energy fractures.

### 6. Fat Embolism Syndrome

Classic Triad: • Respiratory distress

- Neurological changes
- Petechial rash Often follows long bone fractures.

### **7. Posterior Shoulder Dislocation**

Often missed. Associated with: • Seizures

- Electrocutation
- Major trauma Always obtain an axillary view.

### **8. Hip Dislocation**

Orthopaedic emergency due to risk of AVN. Target: Reduction within 6 hours whenever possible.

### **9. Necrotizing Fasciitis**

Key Features: • Severe pain

- Rapid progression
- Systemic toxicity Emergency Treatment: Aggressive surgical debridement.

### **10. Cervical Spine Trauma**

Assume cervical injury until proven otherwise in major trauma patients. Immobilize first. Investigate second.

### **The Emergency Rule**

Life Threatening → Treat First

Limb Threatening → Treat Next

Function Threatening → Treat Thereafter

### **High-Yield Viva Questions**

1. What is the earliest sign of compartment syndrome?
2. What is the emergency treatment for septic arthritis?
3. Define an open fracture.
4. What is the classic triad of fat embolism syndrome?
5. Why must hip dislocations be reduced urgently?

### **Rapid Revision Box**

Compartment Syndrome → Fasciotomy

Open Fracture → Antibiotics + Debridement

Septic Arthritis → Aspiration + Antibiotics

Hip Dislocation → Urgent Reduction

Cauda Equina → MRI + Decompression

### **Life in Orthopaedics Take Home Message**

The best emergency diagnosis is the one made early. Learn to recognize red flags, trust your clinical examination, and never delay referral when a limb or life is at risk.

*Dr Arnav Kadian | Life in Orthopaedics | Where Healing Meets Movement*