

Orthopedic Surgery Objectives

Assumptions

1. The orthopedic segment of your Clerkship is limited however, your exposure to musculoskeletal problems in General Practice will comprise a significant portion of your daily work, both in an office setting and when working in the Emergency Department.
2. It is expected that prior to your orthopedic rotation, you will have reviewed your basic general MSK anatomy and have a general overview of the physiology and pathology of the MSK system. You are urged to review the MSK notes from Medical prior to your rotation in orthopedics.

Acute Injuries and Conditions

During your rotation, it is unlikely you will be exposed to all of the following. You will, however, be exposed to these conditions at some point in your medical career and the most critical topics will be assigned as teaching topics during your rotation.

1. To perform a detailed MSK history and physical exam, propose initial laboratory and radiographic investigations and provide appropriate initial management of common MSK injuries and complaints.
2. To be able to actively and concisely describe various common fracture patterns and recognize the importance of closed versus open fractures.
3. To be able to differentiate between subluxation and dislocations commonly encountered in primary care medicine.
4. Following the accurate assessment of acute injuries, you should be able to provide appropriate initial management including basic stabilization techniques such as application of a cervical collar, various back slabs and splints as well as be familiar with immobilization and transport techniques involved with traumatized patients with attention to protection of potential spine injuries.
5. To be familiar with the neurovascular assessment of extremity injuries to recognize the degree of urgency for further assessment by specialists of common potentially limb threatening injuries. This will include recognizing the symptoms and signs of compartment syndrome.
6. Describe the symptoms and signs of acute and chronic osteomyelitis and recognize the features of septic arthritis. Recognize the signs and symptoms of inflammatory and non-inflammatory joint disease. In particular, primary osteoarthritis, secondary osteoarthritis, gout, pseudogout and rheumatoid arthritis as well as septic arthritis described above. He should be able to describe, with help, diagnose and differentiate the above and recognize which conditions require urgent referral.

7. To recognize what is the normal appearance of the basic appendicular and spinal skeleton including the ability to triage a cervical spine as being stable or unstable and describe stabilization techniques required for potential transfer of such patients.
8. To recognize common causes of cervical and low back pain including acute injuries and chronic degenerative causes including spinal stenosis and disc herniation in the cervical or lumbar regions.
9. To be able to recognize and differentiate common metabolic bone diseases including osteoporosis and osteomalacia and be familiar with the current recommendations for evaluation and treatment options for osteoporosis.
10. To recognize the radiographic features of benign and malignant neoplasms of bone as well as being able to recognize the features of metastatic bone disease.

Skills

- To be able to accurately compile a broad differential diagnosis for common MSK disorders based on an accurate history and physical examination.
- To recognize the significance of significant acute orthopedic injuries including initial open fracture management, evaluation for compartment syndrome, precautions to be taken in the management of trauma patients including those of the spine and appendicular skeleton and to be proficient in the initial management of appropriate splinting for the above described injuries.
- Describe proper techniques of joint aspiration and where appropriate be able to inject the knee or shoulder joint.