



EMC 340 Introduction to Clinical Medicine

33 Musculoskeletal


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Outcomes

Upon completion of this lecture the learner should be able to:

- Review the anatomical structures in the musculoskeletal system.
- Review the basic techniques of the extremity and gross motor survey (skill sheet).
- Discuss certain anatomical structures of clinical significance, with attention to a few structures not often discussed: the scaphoid (navicular) bone, carpal tunnel, thenar eminence, rotator cuff.
- Explain the significance of certain abnormalities of the extremity exam.




Musculoskeletal Anatomy

- Joint structure and function
- Bone, muscle, tendon



Elbow

- Bursa
- Elbow
 - Radioulnar joint
 - Ulnar nerve
 - Radial nerve
 - Median nerve
 - Medial epicondyle



Wrist / Hand

- Wrist / hand
 - Carpal bones
 - Scaphoid (navicular)
 - MCP
 - PIP
 - DIP
 - Carpal tunnel
 - Median nerve
- Pronator - Supinator muscles




Leg

- Foot
 - Tarsals
 - Metatarsals
 - MTP
- Achilles tendon




Knee / Hip

- Knee
 - ACL
 - MCL
 - LCL
 - Medial meniscus
- Hip
 - Femur head, neck, trochanters



Spine


- Cervical
- Thoracic
- Lumbar
- Vertebral foramen
- Intervertebral foramen



Techniques of Examination


- Tenderness, crepitus, deformity
- From proximal to distal
- Bone / joint / bone
- Phelan's ([see below](#))
- Straight leg raise ([see below](#))

<http://eduserv.hscer.washington.edu/hubio553/glossary/>



Abnormalities

- Rotator cuff
- Thenar abscess
- Tenosynovitis



Summary

We have discussed:

- The clinical anatomy and the techniques of the exam of the musculoskeletal system.
- Certain anatomical structures of clinical significance: the scaphoid (navicular) bone, carpal tunnel, thenar eminence, and rotator cuff.
- The potentially disabling significance of certain abnormalities of the extremity exam.
