

MSK anatomy of the Lower Extremity

What do you need to know as medical student?

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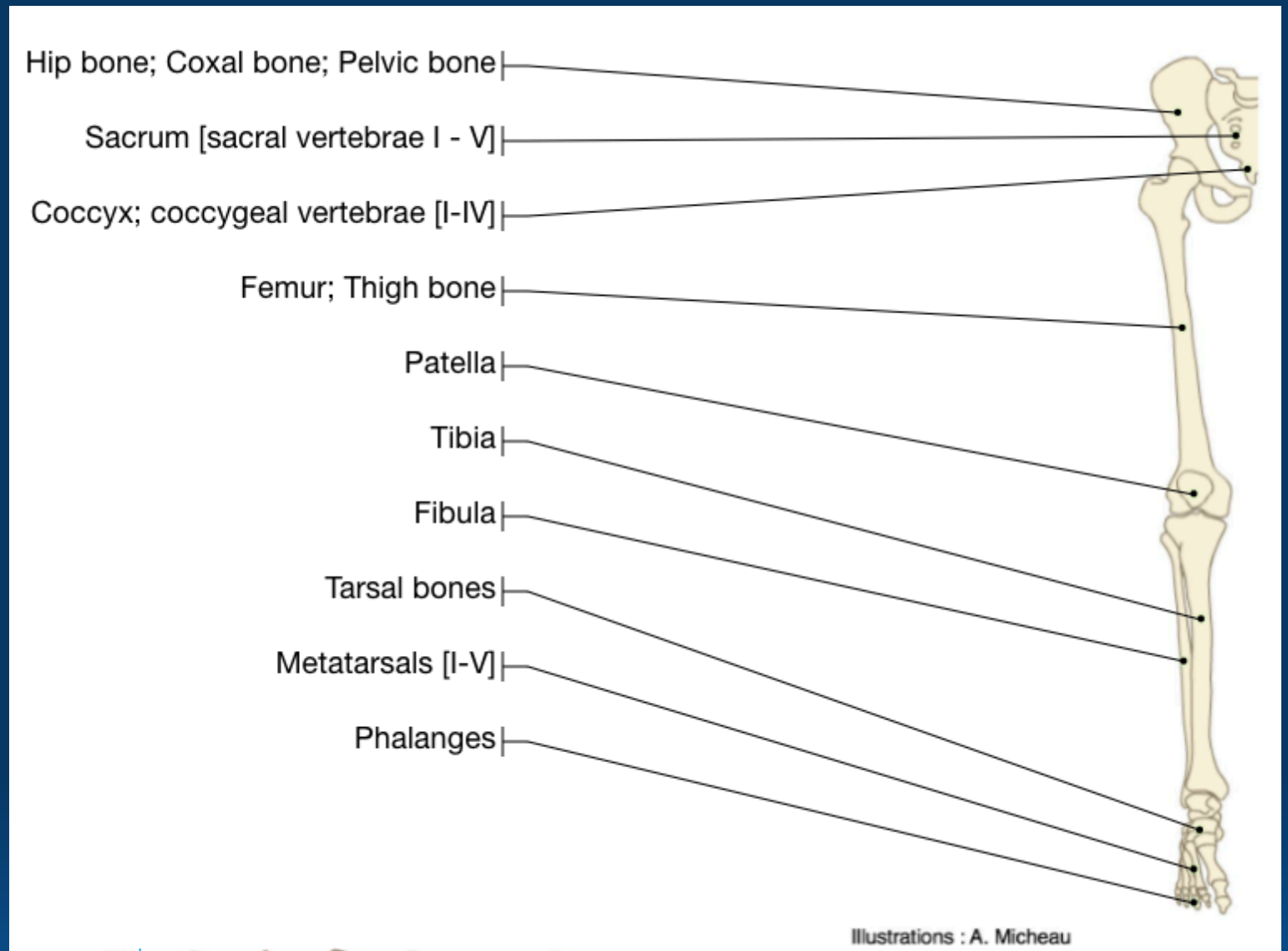
Riyadh-Saudi Arabia

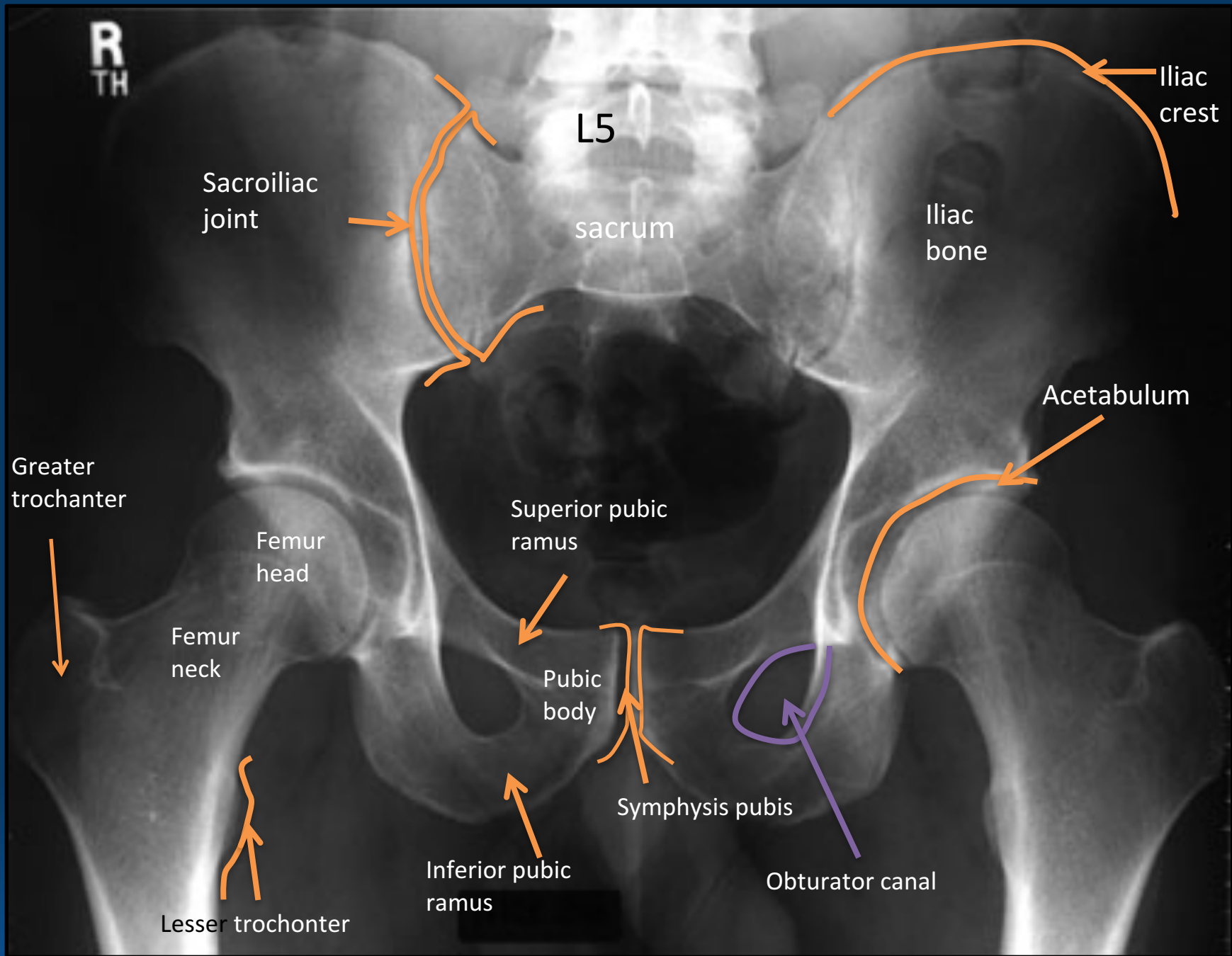
Objective

- Know the high yield functional anatomy of the lower extremity joints (sacroiliac, Hip, Knee, Ankle/Foot)
- Develop simplified approach to read MSK images
- Know the limitation of the imaging modalities.
- Know the high yield MSK injuries/ abnormalities of the lower extremity

Overview:

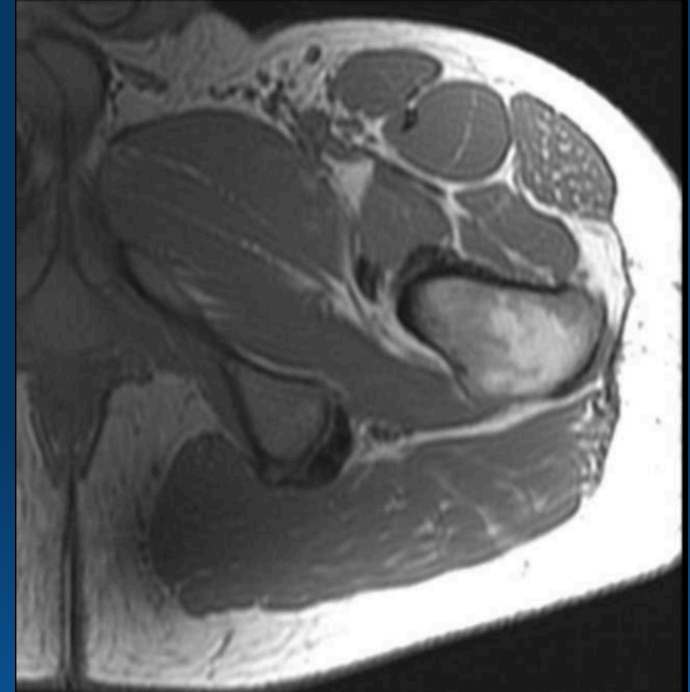
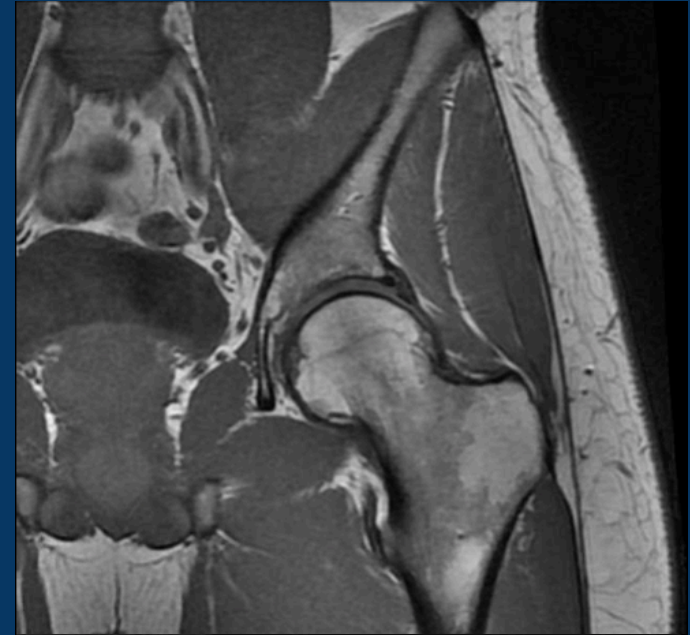
- Below bare minimum knowledge!





Hip

- High yield tendons
- High yield ligaments
- High yield Neurovascular structures
- High yield injuries



Hip

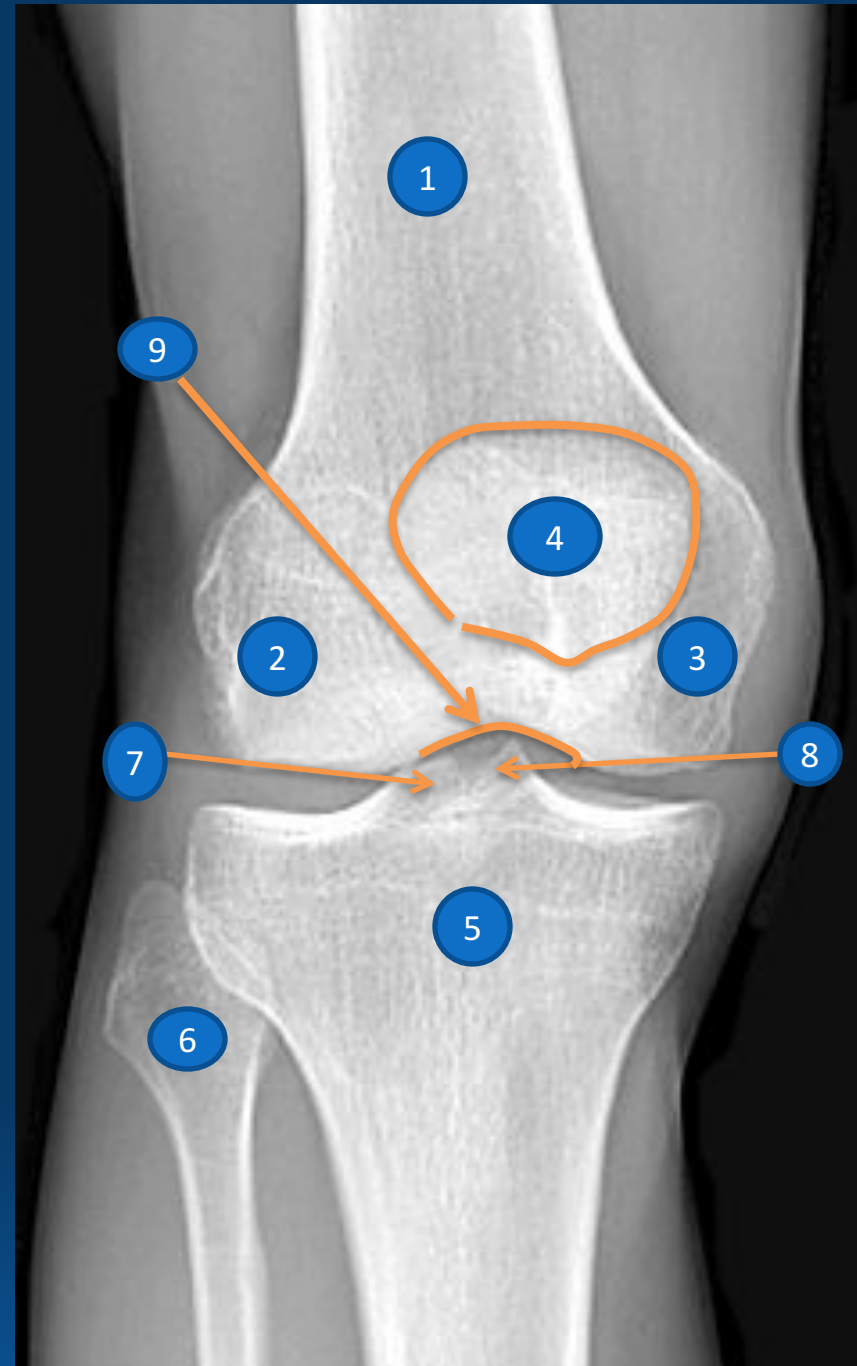
- High yield tendons
- High yield ligaments
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- High yield injuries



CONGENITAL HIP DISLOCATION? Which side?

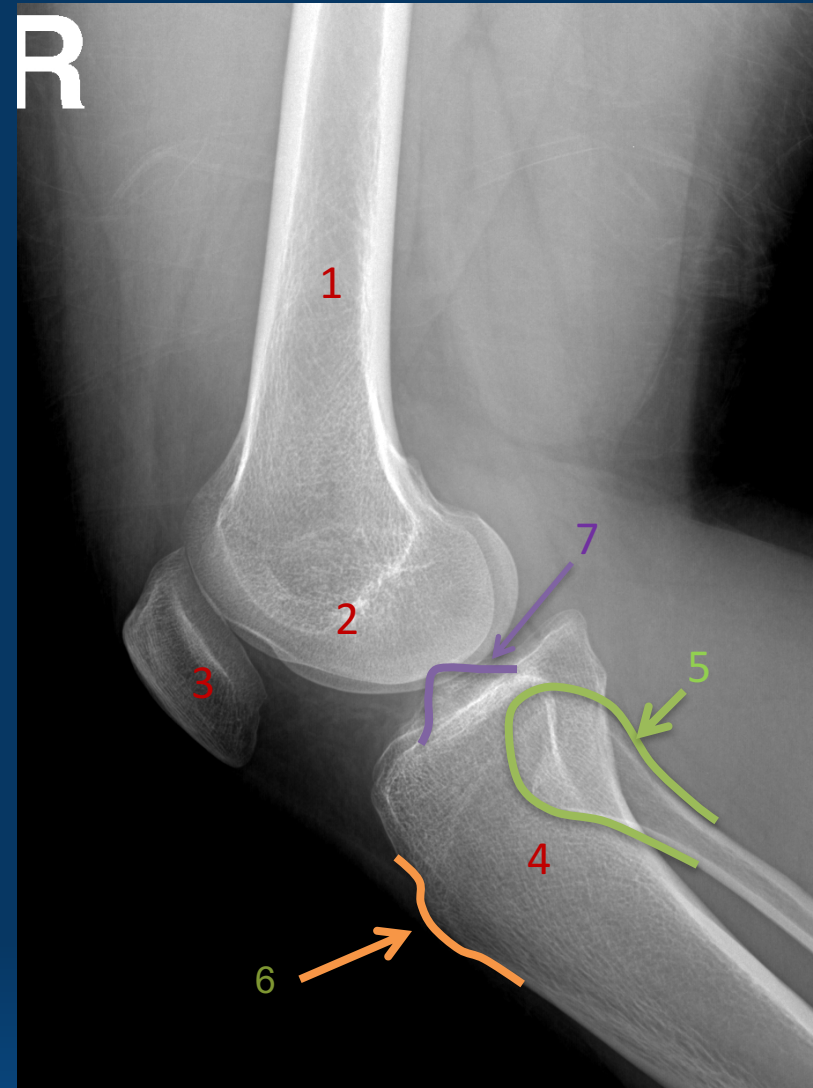
Knee

- 1- Femur
- 2- Lateral condyle
- 3- Medial condyle
- 4- Patella
- 5- Tibia
- 6- Fibula
- 7- Lateral tibial spine
- 8- Medial tibial spine
- 9- Intercondyle notch



Knee

- 1- Femur
- 2- Femur condoyle
- 3- Patella
- 4- Tibia
- 5- Fibula
- 6- Tibial tuberosity
- 7- Tibial spine



Knee

- High yield tendons
- High yield ligaments
- High yield Neurovascular structures
- High yield injuries



Knee

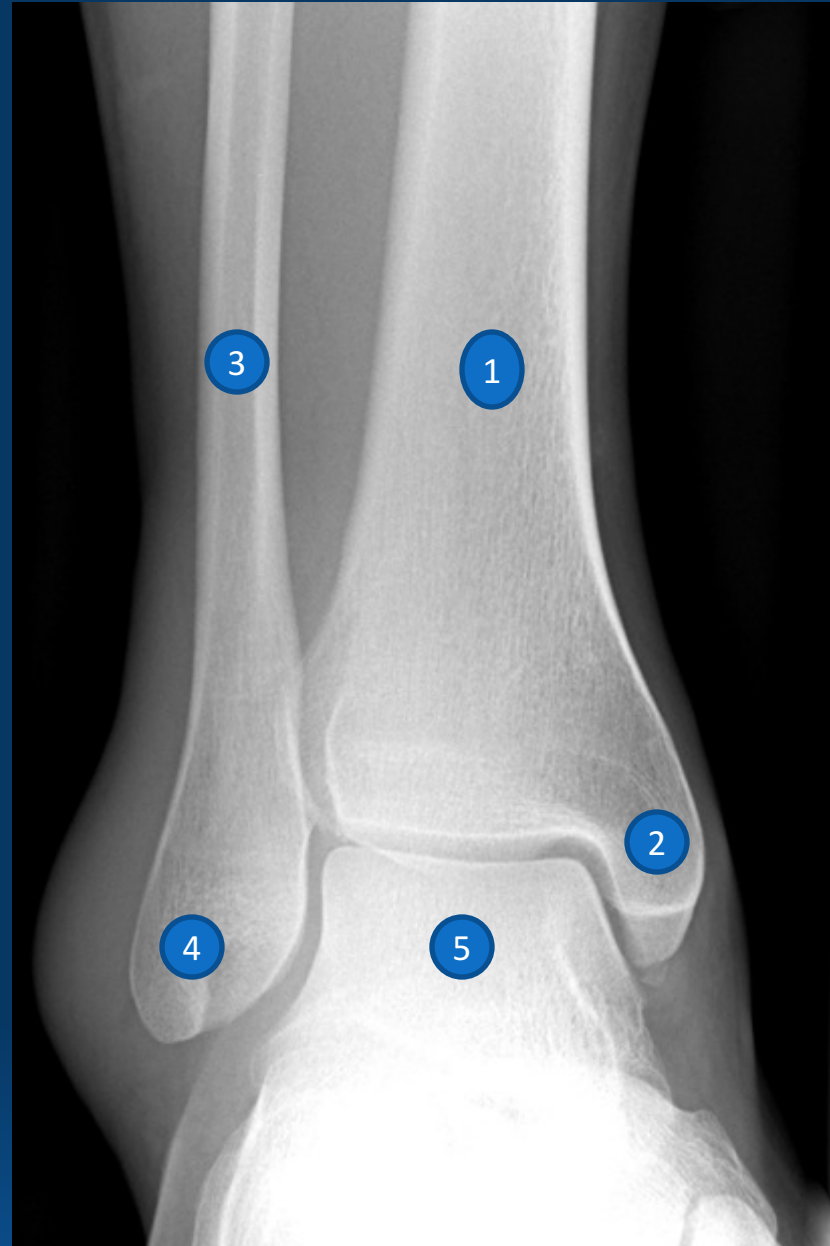
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lipohemarthrosis

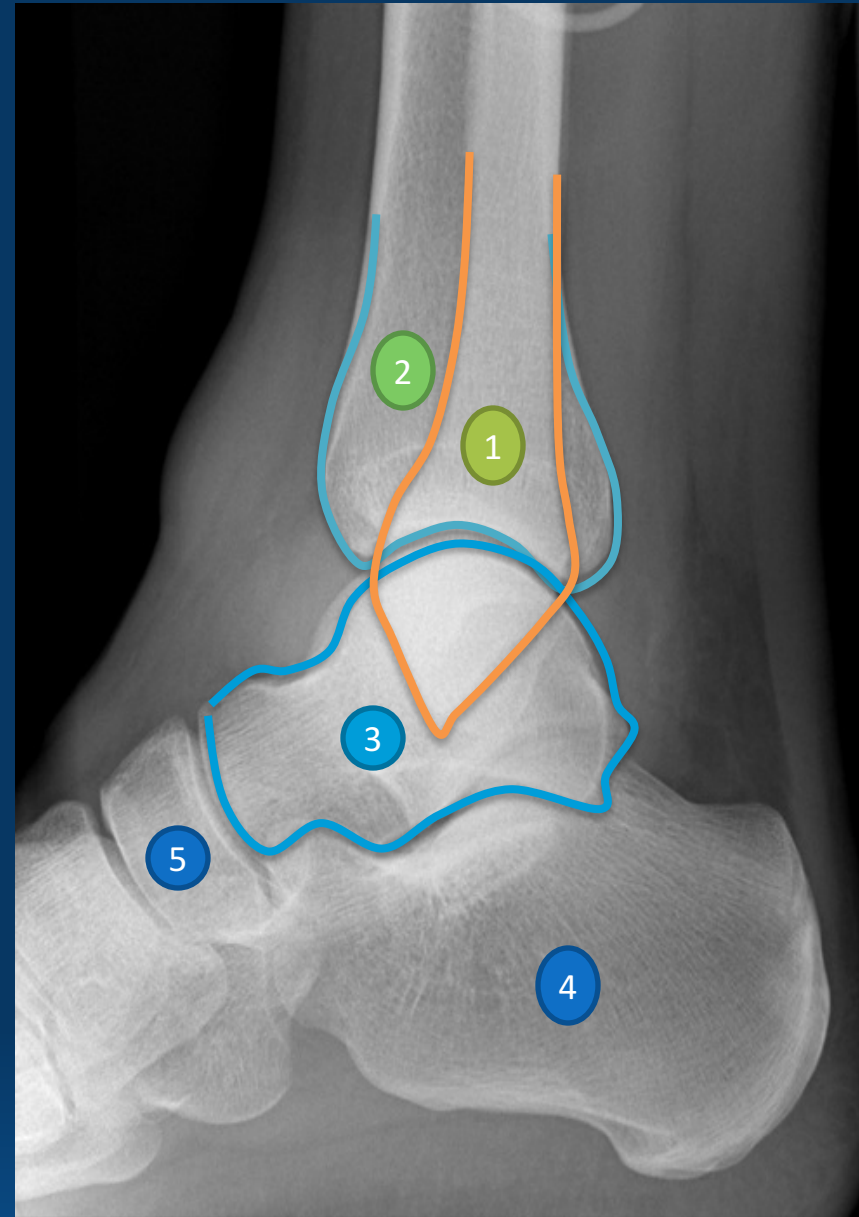
Ankle

- 1- Tibia
- 2- Medial malleolus
- 3- Fibula
- 4- Lateral malleolus
- 5- Dome of talus



Ankle

- 1- Fibula
- 2- Tibia
- 3- Talus
- 4- Calcaneus
- 5- Navicular



Ankle

- High yield tendons
- High yield ligaments
- High yield Neurovascular structures
- High yield injuries



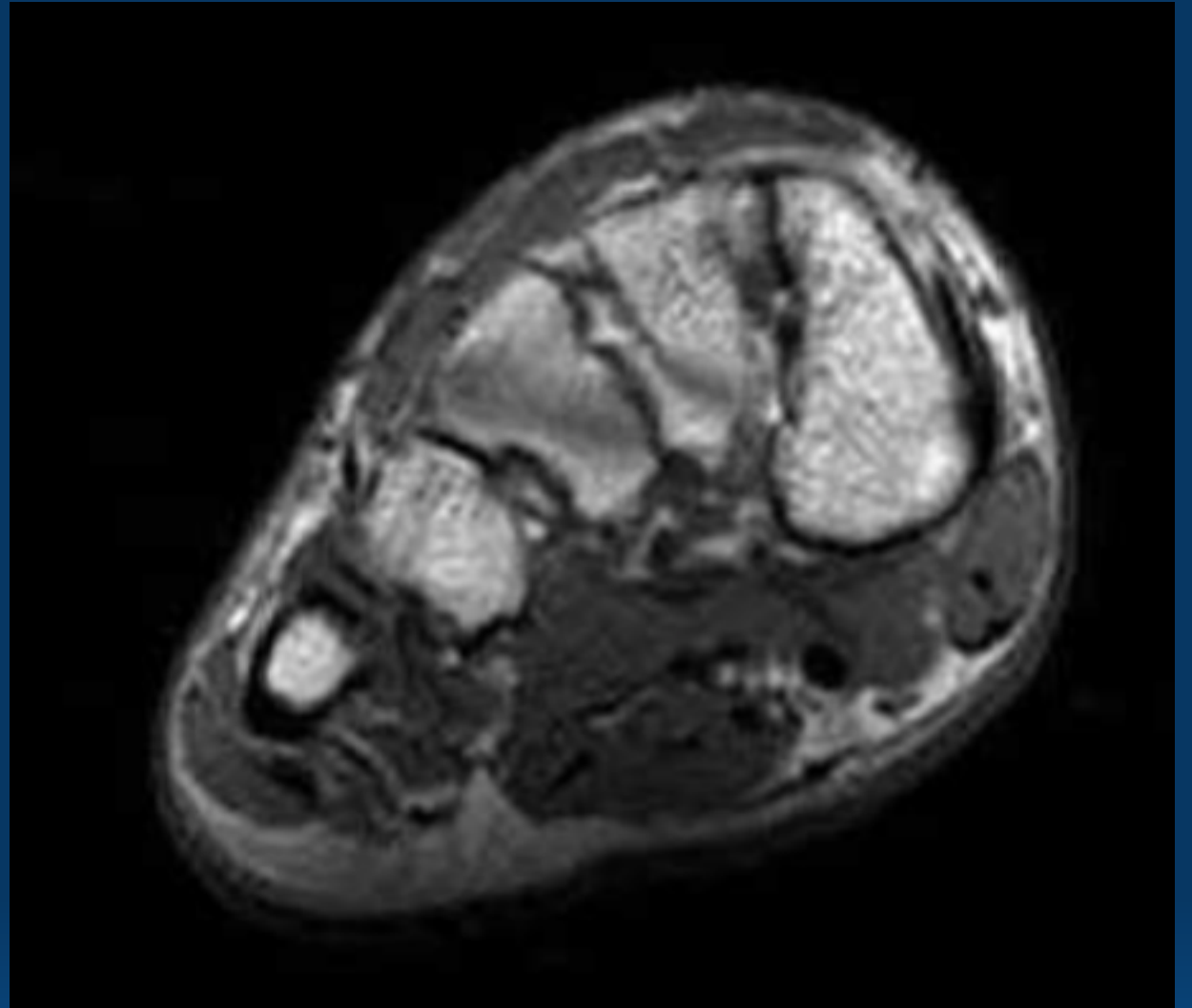
Foot

- 1- Medial cuneiform bone
- 2- Intermediate cuneiform bone
- 3- Lateral cuneiform bone
- 4- Cuboid bone
- 5- Navicular bone
- 6- Calcaneal bone
- 7- Talus
- 8- Metatarsal bone (1st toe)
- 9- Proximal phalanx (1st toe)
- 10- Distal phalanx (1st toe)



Foot

- High yield tendons
- High yield ligaments
- High yield Neurovascular structures
- High yield injuries



Recourses (most important slide)

- Review articles from Radiographic journal (peer reviewed)
- AAOS comprehensive orthopedic review
- Radiopedia (not peer reviewed, open source)
- Orthobullet (not peer reviewed, open source)
- E. anatomy

Take care!

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