

## Positioning and Planes for Extremity CT Exams

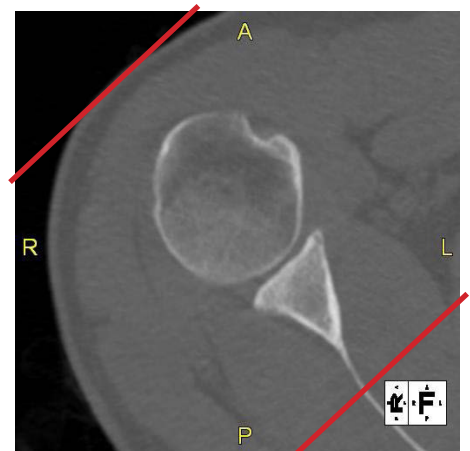
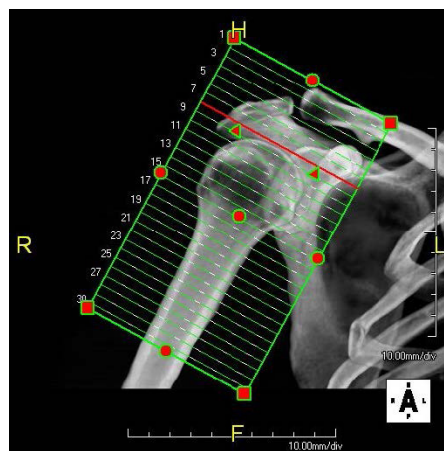
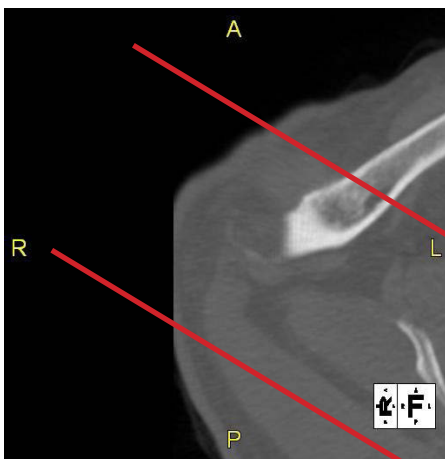
### SHOULDER CT

#### Positioning

- Pt supine
- Affect arm by side with palm up
- Contralateral arm above head

#### Coverage

- From above AC joint to the bottom of the scapula.
- If there is a shoulder prosthesis, scan to include the distal end of the humeral component.
- Field of view (FOV) just wide enough to include entire scapula and proximal humerus.



Prescribe coronal plane off of axial images parallel to supraspinatus muscle

- Prescribe sagittal plane off axial images with line parallel to bony glenoid.
- Image from scapular wing through deltoid muscle.

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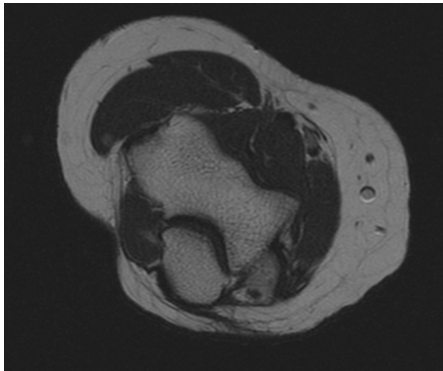
### ELBOW CT

#### Positioning

- Patient supine
- Arm by side or raised above head
- Palm up

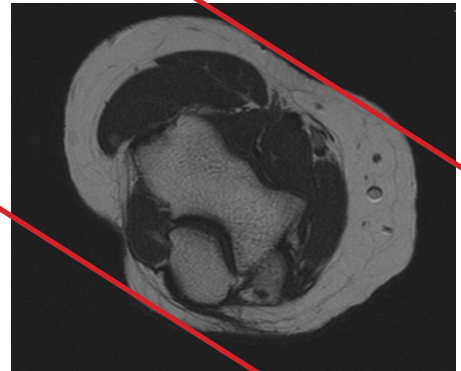
#### Coverage

- From distal humeral metadiaphysis to the radial tuberosity.



#### Sagittal Imaging Plane

- Prescribe plane perpendicular to coronal plane
- Scan through entire elbow.



#### Coronal Imaging Plane

- Prescribe plane parallel to anterior humerus at condyles.
- Scan through entire elbow.

## Positioning and Planes for Extremity CT Exams

### WRIST CT

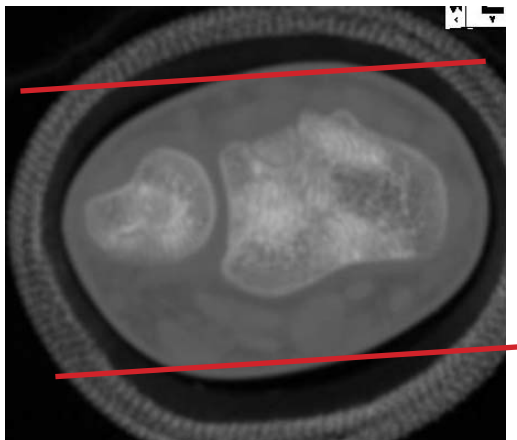
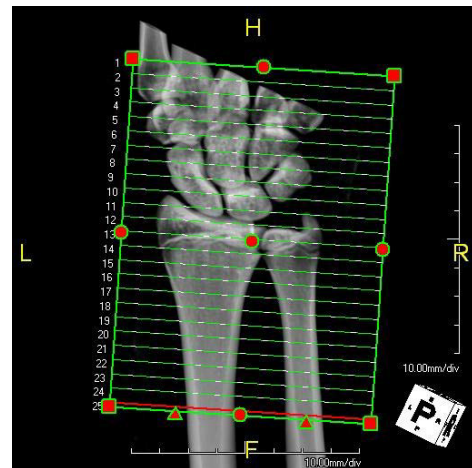
#### Positioning

- Patient prone
- Arm over head ("Mighty Mouse Position")
- Arm as straight as possible
- Wrist centered in gantry



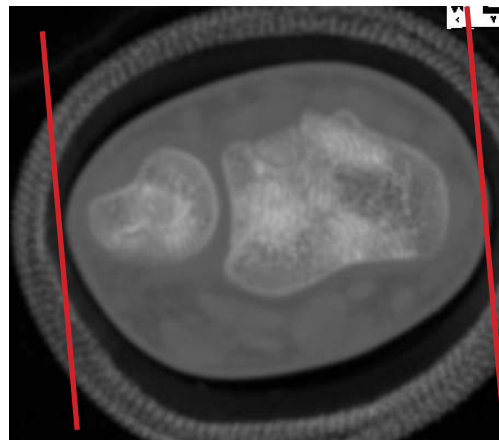
#### COVERAGE

- Prescribe plane parallel to distal radius.
- Scan from proximal metacarpals through distal radial/ulnar metaphysis.



#### Coronal Imaging Plane

- Prescribe plane parallel to line drawn from ulnar styloid through radial styloid.
- Scan through entire wrist

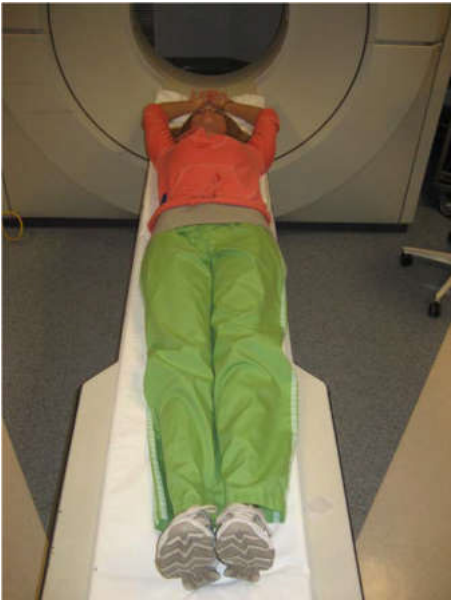


#### Sagittal Imaging Plane

- Prescribe plane perpendicular to coronal plane
- Scan through entire wrist.

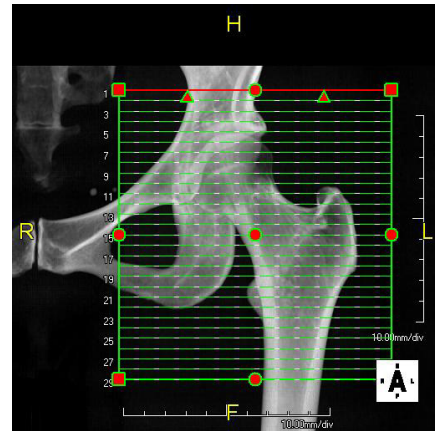
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### HIP CT



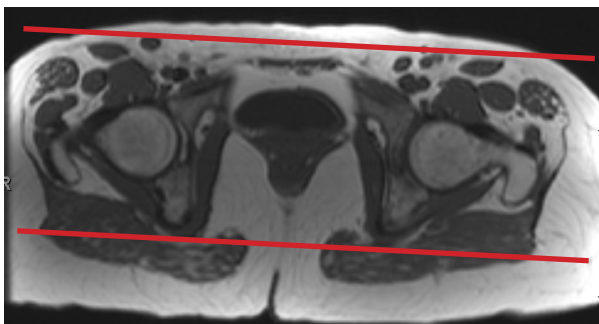
#### Positioning

- Patient supine
- Legs flat on table



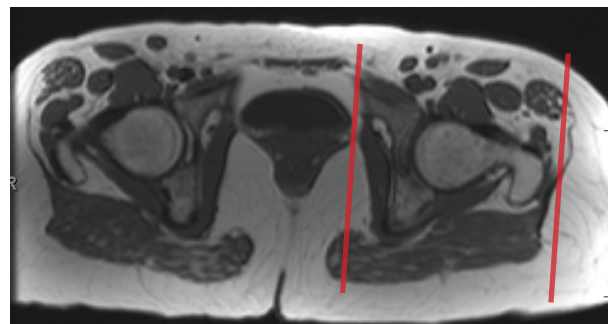
#### Scanning Plane

- Prescribe plane parallel to acetabular roof
- Scan from acetabular roof through lesser trochanter



#### Coronal Imaging Plane

- Prescribe plane parallel femoral heads.
- Scan from ischium through pubic symphysis



#### Sagittal Imaging Plane

- Prescribe plane perpendicular to coronal plane.
- Scan from acetabulum through greater trochanter.



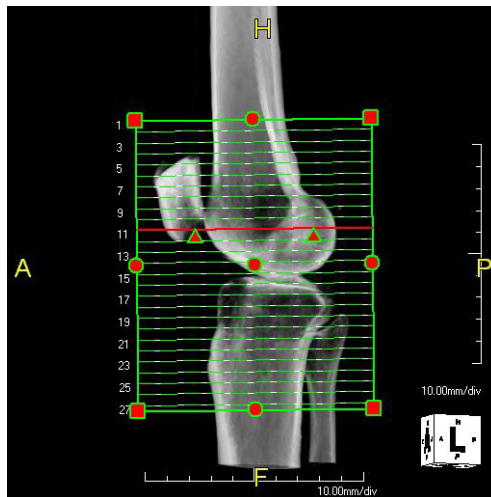
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### KNEE CT



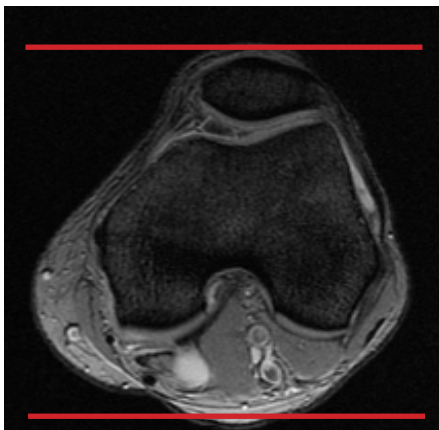
#### Positioning:

- Patient Supine with feet first into scanner
- Keep knees extended, side-by-side.
- Tape the feet together with toes pointing up to help keep the knees from moving.
- Slide patient so that the knee being scanned is in the center of the table



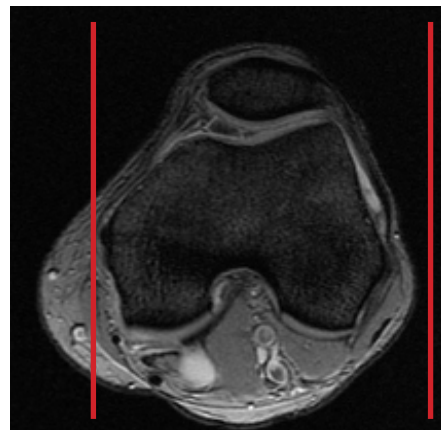
#### Scanning Plane

- Prescribe plane parallel to axis of the tibial plateau.
- Scan knee from suprapatellar region to the proximal tibia



#### Coronal Imaging Plane

- Prescribe plane with line parallel to femoral condyles. Image entire knee.



#### Sagittal Imaging Plane

- Prescribe plane perpendicular to coronal plane
- Scan from the medial to the lateral femoral condyle.

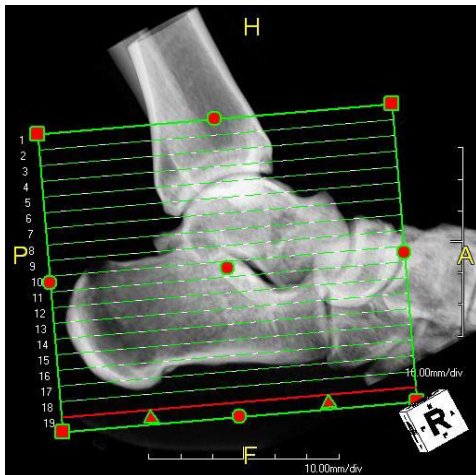
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### ANKLE CT



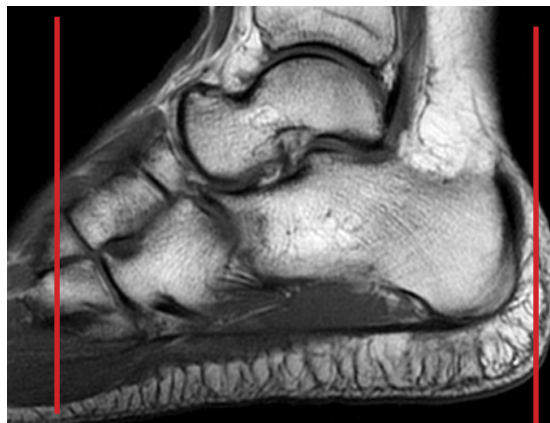
#### Positioning:

- Patient supine
- Center in scanner both feet or foot of interest (use foot holder, if available). If imaging both feet, bring them together
- Toes pointing straight up.
- Foot inverted slightly



#### Scanning Plane

- Prescribe plane parallel to axis of calcaneus.
- Scan ankle from distal tibia through beyond the inferior calcaneus



#### Coronal Imaging Plane

- Prescribe plane perpendicular to axial imaging plane. Scan ankle from calcaneus through metatarsal bases.

#### Sagittal Imaging Plane

- Prescribe plane with line bisecting calcaneus.
- Scan through entire foot.

