

CT Hand

Application Examples: fracture metacarpals

Scan Protocol (See for Technical Factors)

Upper Extremity

If patient has a digit fracture and it is the first CT scan of this fracture, create coronal and sagittal MPRs to hand then digit also. If it is a follow up scan, create coronal and sagittal MPRs to area of interest only.

Patient Position: Patient lying in prone position, with affected arm extended above head. Place body off-centered in effort to set affected hand in isocenter. Hand is positioned pronated with fingers straight and close together. Emphasis is acquiring area of interest in true axial position.

Scan Range: DRUJ (distal radioulnar joint) through metacarpals include entire fracture or to specified area of interest only.



2D Reformations: First, align all viewport lines to be orthogonal to hand. Next, make coronal and sagittal MPRs along the long axis of the hand. If patient is not in ideal position, create an axial MPR data set perpendicular to the long axis of the hand. If there is a metacarpal or phalange fracture, create additional sets of MPRs, aligning orthogonal planes to the affected anatomy.

Coronal Hand MPR Sagittal Hand MPR

2x2mm



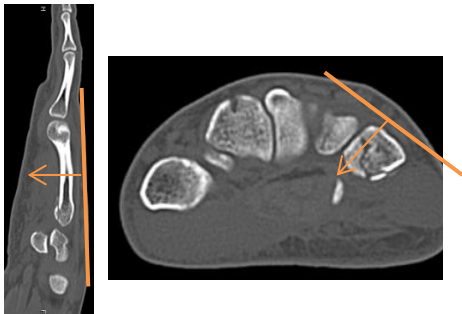
2x2mm



Post processing example of a 5th metacarpal fracture is depicted below.

Coronal Digit MPR

1x1 mm



Sagittal Digit MPR

1x1 mm



Axial MPR

1x1 mm



3D Reformations: Upon request.