CT Elbow

Siemens go.All

Application Examples: fracture

Technical Factors

Detector Collimator	Acq 32 x 0.7 mm
Care kV	On / Sn110
Care Dose 4D	On / 80 mAs
Rotation Time (seconds)	0.5
Pitch	0.8
Typical CTDIvol	6.45 mGy ± 50%

Topogram: Lateral & AP, 256 mm

Extremity	Recon Type	Width / Increment	Algorithm	Safire	Window	FoV	Series Description	Networking	Post Processing
Recon 1	Axial	1 x 1	Br64	Off	Extremity	100	AXIAL	PACS	None
Recon 2	3D:COR	2 x 2	Br64	Off	Extremity	-	COR	PACS	Coronal MPR
Recon 3	3D:SAG	2 x 2	Br64	Off	Extremity	-	SAG	PACS	Sagittal MPR
Recon 4	Axial	0.6 x 0.6	Br36	Off	Extremity	100	AXIAL 0.6 STND	TeraRecon	None

Patient Position: Place patient in a lateral decubitus position, with affected arm extended above head and hand supinated. Although the patient is physically prone or decubitus, patient orientation is supine feet first on the scanner.

Scan Instructions: Select patient position supine feet first.

Scan Range: Distal humerus through proximal radius and ulna including entire fracture.

2D Reformations: Align all viewport lines to be orthogonal to elbow, aligning to the humerus and make coronal and sagittal MPRs. If patient is unable to place elbow in ideal position, create axial MPR (no additional images of forearm needed).

Image ranges:

Elbow Extended

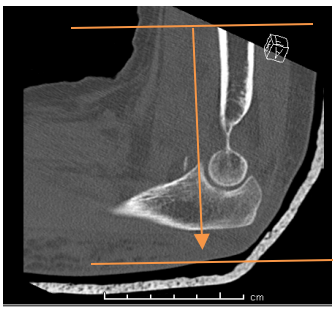
Coronal MPR 2x2 mm

Sagittal MPR 2x2 mm

Elbow Flexed

Coronal MPR 2x2 mm

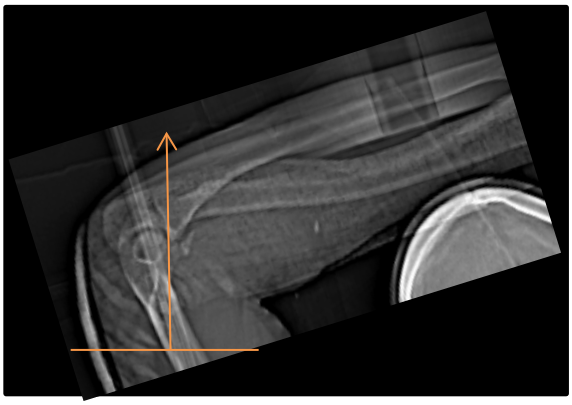
Axial MPR 2x2 mm



3D: Upon request. See post processing protocol.

Alternative Elbow Position #1 due to limited mobility.

Patient Position: Place patient in supine head first position with arm above head. Set topogram to start above elbow.



Scan Instructions: Select patient position supine feet first.

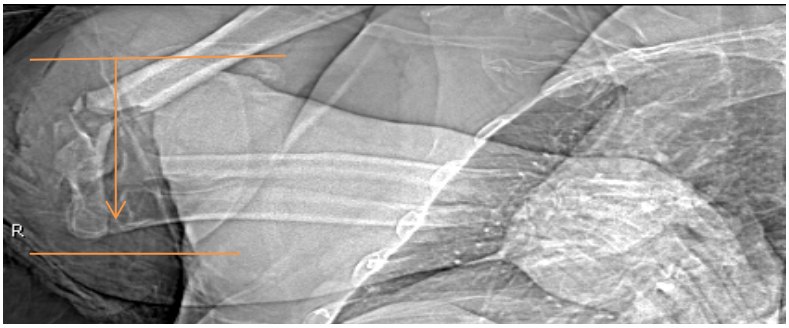
Scan Range: Distal humerus through proximal radius and ulna including entire fracture.

2D Reformations: Align all viewport lines to be orthogonal to humeral condyles and make coronal sagittal and axial MPR image sets to humerus. Then align all viewport lines orthogonal to radius and ulna. Make coronal, sagittal and axial MPR image sets to radius and ulna.

3D: Upon request. See post processing protocol.

Alternative Elbow Position #2 due to limited mobility.

Patient Position: Place patient supine with arm on body or at side. Secure with straps and sponges as necessary. Instruct patient there will be a breath hold.



Scan Range: Distal humerus through proximal radius and ulna including entire fracture.

Scan Instructions: Select patient position according to patient's actual position. Turn breath hold on. Increase kV to 140.

2D Reformations: Align all viewport lines to be orthogonal to humeral condyles and make coronal sagittal and axial MPR image sets to humerus. Then align all viewport lines orthogonal to radius and ulna. Make coronal, sagittal and axial MPR image sets to radius and ulna.

3D: Upon request. See post processing protocol.