Gundersen Health System

L-Spine Pre-Arthroplasty

Siemens Flash

Application Examples: back pain

Oral Contrast	No
IV Contrast / Volume	No

Technical Factors

Detector Collimator	Acq 128 x 0.6 mm
Care kV	On / 120 kV
Care Dose 4D	On / 260 mAs
Rotation Time (seconds)	1.0
Pitch	0.8
Typical CTDIvol	17.55 mGy ± 50%

Topogram: AP and Lateral, 512 mm

Spine	Recon Type	Width / Increment	Algorithm	Safire	Window	FoV	Series Description	Networking	Post Processing
Recon 1	Axial	3 x 3	I70h	1	Bone	200	AXIAL BONE	PACS	None
Recon 2	Axial	3 x 3	I30s	1	Spine	200	AXIAL STND	PACS	None
Recon 3	3D:AXIAL	2 x 2	I70h	1	Bone	-	AXIAL MPR	PACS	Axial MPR
Recon 4	3D:COR	3 x 3	I30s	1	Bone	-	COR	PACS	Coronal MPR
Recon 5	3D:SAG	3 x 3	I30s	1	Bone	-	SAG	PACS	Sagittal MPR
Recon 6	Axial	0.6 x 0.6	I26s	1	Bone	200	AXIAL 0.6 STND	TeraRecon	None
Recon 7	3D:SAG	2 x 2	I30s	1	Bone	-	OBL RT	PACS	OBL MPR
Recon 8	3D:SAG	2 x 2	I30s	1	Bone	-	OBL LT	PACS	OBL MPR

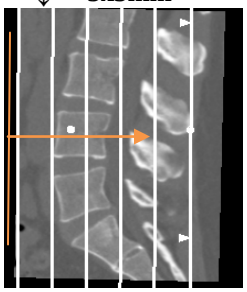
This protocol is used for pre-operative planning for lumbar spine disc arthroplasty surgery. The images note the position of the pubic symphysis in relation to the disc space(s) to be replaced.

Patient Position: Supine feet first with arms comfortably above head.

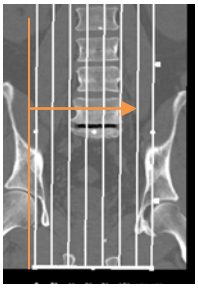
Scan Range: One vertebral level above area of interest through pubic symphysis.

Recons & Reformats: Coronal FoV to include aorta through spinal anatomy and sagittal FoV to include the pubic symphysis anteriorly. Right and left oblique MPRs include facet joints.

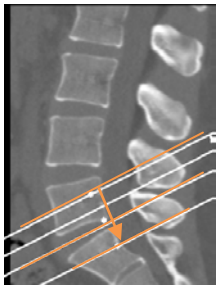
1. Coronal MPR (through aorta) ↓ **3x3mm**



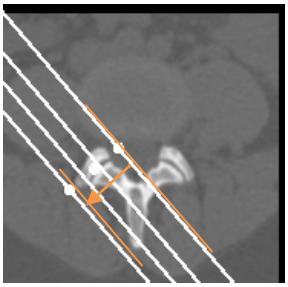
2.Sagittal MPR (large FoV) **3x3mm**



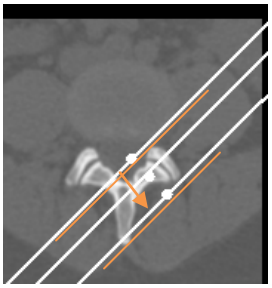
3.Axial MPR (through disc spaces) **2x2mm**



4.Oblique RT MPR (through right facet joints) **2x2mm**



5.Oblique LT MPR (through left facet joints) **2x2mm**



3D: No