Gundersen Health System

L-Spine Pars Defect Low Dose

Siemens Flash

Application Examples: Spondylolysis

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 / 175 mAs					
Rotation Time (seconds)	1.0					
Pitch	0.9					
Typical CTDIvol	$11.86 \text{ mGy} \pm 50\%$					

Topogram: AP and Lateral, 512 mm

L-Spine	Recon Type	Width / Increment	Algorithm	Safire	Window	FoV	Series Description	Networking	Post Processing
Recon 1	Axial	3 x 3	I70h	1	Bone	150	AXIAL BONE	PACS	None
Recon 2	Axial	3 x 3	I30s	1	Spine	150	AXIAL STND	PACS	None
Recon 3	3D:COR	3 x 3	I30s	1	Bone	-	COR	PACS	Coronal MPR
Recon 4	3D:SAG	3 x 3	I30s	1	Bone	-	SAG	PACS	Sagittal MPR
Recon 5	3D:OBL	2 x 2	I30s	1	Bone	-	OBL RT	PACS	Oblique MPR
Recon 6	3D:OBL	2 x 2	I30s	1	Bone	-	OBL LT	PACS	Oblique MPR
Recon 5	Axial	0.6 x 0.6	I26s	1	Bone	150	AXIAL 0.6 STND	TeraRecon	None

Spondylolysis is a defect in the pars interarticularis (bony ring of a vertebra). This protocol is used in effort to minimize dose when evaluating for spondylolysis and primarily used on pediatric patients 18 years or younger.

Patient Position: Patient lying in supine position, arms positioned comfortably above the head, lower legs supported. Place a cushion under the patient's knees—this will reduce the curve in the spine and also make the patient more comfortable.

Scan Rage: L3 through S1, to include defect.

Recons and Reformations: Coronal, sagittal and oblique MPRs using raw data in 4D workplace.

