

L-Spine Pars Defect Low Dose

Siemens 16 Slice

Application Examples: Spondylolysis

Oral Contrast	No
IV Contrast / Volume	No

Technical Factors

Scan Type	Spiral
Detector Collimator	Acq 16 x 0.6 mm
kV / mAs / Rotation Time	130 kV / 100 mAs / 1.0 seconds
Care Dose 4D	Yes
Pitch	0.9
Typical CTDIvol	12.56 mGy

Topogram: AP & Lateral, 512 mm

Spine 3x3	Width / Increment	Kernel	Window	FoV	Series Description	Networking
Recon 1	3 x 3	B60s	Bone	120	AXIAL BONE	PACS
Recon 2	3 x 3	B20s	Spine	120	AXIAL STND	PACS
Recon 3	0.75 x 0.5	B20s	Spine	120	AXIAL 0.75 x 0.5 SMOOTH	MPR / Definition / TeraRecon

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 Range: L3 through S1.

Reformations: Post processing done in 3D card. Oblique MPRs to include entire facet joints as depicted below.

Series: Spine 3x3	Reformat Type	Width / Increment	Window	Series Description	Networking
Recon 3	Coronal MPR	3 x 3	Bone	COR	PACS
Recon 3	Sagittal MPR	3 x 3	Bone	SAG	PACS
Recon 3	Oblique MPR	2 x 2	Bone	OBL RT	PACS
Recon 3	Oblique MPR	2 x 2	Bone	OBL LT	PACS

Oblique RT MPR

Oblique LT MPR

