IMAGING PROTOCOL - CT DCN PEDI CTA ABD-PEL SIEMENS EDGE+128

PROTOCOL REVIEW 2025 02/dtf
Approval Imaging Council February 2025

CTDI: 0-4yr: ≤ 15mGy 5-16: ≤30mGy

PT Prep:

- IV contrast at the discretion of the Radiologist.
 - \circ 2cc per kg of 300 mg iodine/non-ionic (use Omni 350 if over 50lbs), not to exceed 100 ml unless otherwise determined by Radiologist.

PT Positioning:

- Both arms should be raised above head for optimal image quality.
- If PT cannot raise one arm, one arm down is preferred over both arms down.
- If both arms are unable to be raised, this information should be documented in tech notes for the radiologist.

Setup: Supine, AP/LAT scout from above diaphragm through the symphysis pubis (iliac crest for ABD only)

DFOV: Appropriate for patient's body habitus.

Scan Parameters:

- Non-contrast (only if requested)
- Arterial phase
 - o Bolus tracking trigger at 120HU in the descending aorta at the level of the scan start
- Venous Phase (only if ordered)
 - Scan at 60 sec post injection

PEDI PACS SERIES

SCOUT & DOSE "PATIENT PROTOCOL"

Arterial AX 1.5 X 1.5

LUNG AX 1.5 X 1.5

MIP CORONAL 1 x 1

MIP SAGITTAL 1 x 1

MPR COR 3 X 3

MPR SAG 3 X 3

MIP RAO 1 x 1 (if assessing renal artery)

MIP LAO 1 x 1 (if assessing renal artery)

Acquisition Parameters

<u>Pedi < 110lbs</u>		<u>Pedi > 110lbs</u>		Adult 18+	
Scan Type	Spiral	Scan Type	Spiral	Scan Type	Spiral
Pitch	1.4	Pitch	1.2	Pitch	1.2
Detector Configuration	128 x 0.6	Detector Configuration	128 x 0.6	Detector Configuration	128 x 0.6
Slice Thickness	1.5	Slice Thickness	1.5	Slice Thickness	1.5
Rotation Time	0.28	Rotation Time	0.33	Rotation Time	0.5
Care Dose	on	Care Dose	on	Care Dose	on
Care kV	on	Care kV	on	Care kV	on
Dose Optimization	9	Dose Optimization	9	Dose Optimization	9
Quality Ref mAs/ Ref kV	50/120	Quality Ref mAs/Ref kV	66/120	Quality Ref mAs/Ref kV	84/120

Reconstruction Parameters

Recon 1 Axial Soft Tissue				
Kernel	Br38			
ADMIRE	3			
Window	Soft Tissue 400 40			
Slice Thickness	1.5 x 1.5			
Recon 2 Axial Lung				
Kernel	Br59			
ADMIRE	1			
Window	Lung			
Slice Thickness	1.5 x 1.5			
Recon 3 MIP Coronal	Recon 4 MIP Sagittal			
Kernel: Bv40	Kernel: Bv40			
ADMIRE: 3	ADMIRE: 3			
Window: CT Angio 700 80	Window: CT Angio 700 80			
Slice Thickness: 1 x1	Slice Thickness: 1 x 1			
Recon 3 Coronal MPR	Recon 4 Sagittal MPR			
Kernel: Br38	Kernel: Br38			
ADMIRE: 3	ADMIRE: 3			
Window: Soft Tissue 400 40	Window: Soft Tissue 400 40			
Slice Thickness: 3.0 x 3.0	Slice Thickness: 3.0 x 3.0			
Recon 6 Reformat				
Kernel	Br38			
ADMIRE	3			
Window	Mediastinum 350 50			
Slice Thickness	1.5 x 0.6 or 1.0 x 0.7			