IMAGING PROTOCOL – CT DCN CTA Head & Neck Siemen's Edge+128

- **CTDI: 0-4yr: ≤ 15mGy 5-16: ≤25mGy**
- **WO and post scans only with radiologist approval.**
- **Setup: Supine, LAT scout from vertex through the level of the aortic arch, no gantry angle.**

PT Positioning:

- **Supine, AP and Lateral scout, no gantry angle**
- **Scout should extend through the aortic arch for smart prep/bolus tracking**
- **Retract shoulders as much as possible & tilt the patient's head so that a line connecting the lateral canthus of the eye and the EAC is perpendicular to the CT tabletop.**

DFOV: Preferred 15cm

Scan Parameters:

- **Scan from vertex to below the aortic arch *(to include most of arch*)**
- **Contrast:**
  - **2cc per kg of 350 mg (*OMNI 300 if >50 lbs{22.6kg}*), not to exceed 100 ml unless ok by radiologist**
  - **Bolus Tracking in ascending aorta, start scanning upon entry of contrast at the level of the aortic arch or trigger at 40 HU.**
  - **10 second monitoring delay on bolus tracking/monitoring**

PACS SERIES

1. SCOUT & Patient Protocol (Dose Report)
2. ST AXL 1 x 1
3. BONE AXL 1 x 1
4. MIP COR 1 X 1
5. MIP SAG 1 X 1
6. MIP LAO 1 x 1
7. MIP RAO 1 x 1

Acquisition Parameters

0-40 lbs		40-110lb		110lb +/Adult	
Scan Type	Spiral	Scan Type	Spiral	Scan Type	Spiral
Pitch	1.4	Pitch	1.4	Pitch	1.2
Detector Configuration	128 x 0.6	Detector Configuration	128 x 0.6	Detector Configuration	128 x 0.6
Slice Thickness	1	Slice Thickness	1	Slice Thickness	1
Rotation Time	0.33	Rotation Time	0.5	Rotation Time	0.28
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	156	Quality Ref mAs	156	Quality Ref mAs	84
Ref kV	80	Ref kV	80	Ref kV	120

Reconstruction Parameters

Recon 1 ST Axial	
Kernel	**Br38**
ADMIRE	**3**
Window	**Soft Tissue 400 40**
Slice Thickness	**1 x 1**
Recon 2 Bone Axial	
Kernel	**Br59**
ADMIRE	**3**
Window	**Shoulder 2000 x 400**
Slice Thickness	**1 x 1**
Recon 3 MIP Coronal	**Recon 4 MIP Sagittal**
Kernel: Bv38	**Kernel: Bv38**
ADMIRE: 3	**ADMIRE: 3**
Window: CT Angio 700 80	**Window: CT Angio 700 80**
Slice Thickness 1 x 1	**Slice Thickness 1 x 1**
LAO and RAO 45 ° to see carotid split	
Recon 5 LAO MIP	**Recon 6 RAO MIP**
Kernel: Bv38	**Kernel: Bv38**
ADMIRE: 3	**ADMIRE: 3**
Window: CT Angio 700 80	**Window: CT Angio 700 80**
Slice Thickness: 1 x 1	**Slice Thickness: 1 x 1**