Imaging Protocol – CT Pedi CTA_CTV Head

CTDI: 0-4yr: ≤ 15mGy 5-16: ≤25mGy

PT Positioning:
- If 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.
- IV contrast:
  - ❖ 2ml per kg of Omni 300 (Omni 350 if over 50 lbs), not to exceed 100ml unless ok by radiologist

Scan Parameters:
- Smart Prep:
  - -CTA: Place ROI over the aortic arch, triggering at 140 HU
  - -CTV: No smart prep needed, inject at angio flow rate and scan 40 sec into bolus
- Start scan at the bottom of the skull base and scan through the top of the head

STEALTH:
- Start scan from the bottom of the top teeth through the top of the head (include entire nose)

Set-Up: LAT scout from below the mandible through the top of the head

DFOV: 25 cm

PACS SERIES
1. SCOUT
2. ST AX
3. MIP COR 1x1
4. MIP SAG 1x1
5. DOSE REPORT

Acquisition Parameters

PT AGE	0-5mo	6-18m	19m-6y	7y-14y	15+
Scan Type	AXIAL	AXIAL	AXIAL	HELICAL	HELICAL
Scan FOV	PED HEAD	SM HEAD	SM HEAD	HEAD	HEAD
mA *Smart mA/ODM	400	490	380	375	250
kVp *kV assist	80	80	100	100	100
Pitch and Speed (mm/rot)	N/A	N/A	N/A	0.984:1 (140.63 mm/s)	0.984:1 (78.75 mm/s)
Detector/ *Smart Coverage	120*	160*	160*	40	40
Thick	1.25	1.25	1.25	1.25	1.25
Speed	0.28	0.35	0.28	0.28	0.50

Reconstruction Parameters

RECON 1(ST AX)	400/40
Algorithm	STND
ASIR	50%
Recon Type	STND
Recon Mode (for helical)	Helical Full
Slice Thickness	1.25
Increment	1.25
RECON 2 (ST REF)	**400/40**
Algorithm	STND
ASIR	50%
Recon Type	STND
Recon Mode (for helical)	Helical Plus
Slice Thickness	0.625
Increment	0.3125