Aorta Coarctation protocol: 05/15/2009

FSE Black Blood Axial Breath-Hold (ECG gated if patient is unable to hold their breath)

FSE Black Blood Coronal Oblique Breath-Hold (ECG gated if patient is unable to hold their breath)

FSE Black Blood Sagittal Oblique Breath-Hold (ECG gated if patient is unable to hold their breath)

CINE Sagittal Oblique Aortic Arch (16-25 frames per cardiac cycle)

CINE Coronal Oblique Aortic Isthmus (16-25 frames per cardiac cycle)

VENC CINE Sagittal Oblique

VENC CINE Coronal Oblique

VENC CINE Axial (distal to coarctation) if measurement on VENC CINE Sagittal and Coronal is insufficient

3D CE MRA Sagittal Oblique Breath-Hold entire Thoracic Aorta Pre-Contrast for subtraction

3D CE MRA Sagittal Oblique Breath-Hold entire Thoracic Aorta (perform scan twice with minimum delay between scans)

Contrast Dose - 0.2 mmol / kg body weight, Rate – 3 ml per second, Follow with 20 ml saline flush

This can be done only at CIC. If volumetrics are required, add LVOT and RVOT cine sequences and short axis cine. Requires post processing for volume and flow analysis.