

Bryan Radiology Associates
CTA neck and head

Last update: 2021-01-03 JN

Setup

1. Head First Supine
2. See CT brain protocol for scan and reconstruction parameters

DFOV: Preferred 20 cm

Scan:

- CT Brain without contrast
- Scan range: from approx 0.5 cm superior to skull vertex outer table to AP window (fig 2)
- Smart Prep or Bolus Tracking in the ascending aorta (trigger set at 80 HU on Siemens) (45 HU on GE) (fig 1)
- 10 second monitoring delay on Bolus Tracking/Smart Prep

Contrast:

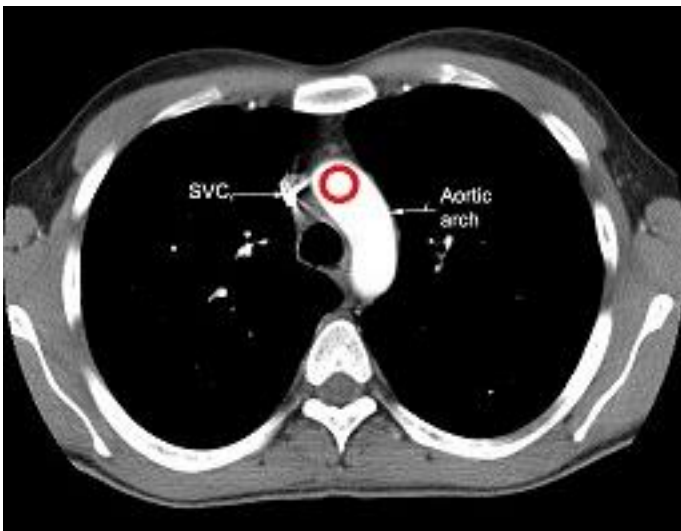
- 100 ml of 320- 370 mg/dl non-ionic contrast @ 5 ml/sec with an 18 gauge catheter (e.g. Isovue 370 or Omnipaque 350)
- If unable to access 18 gauge, use a 20 gauge and adjust to 4ml/sec

Injector Setup:

- 30 ml Saline Flush @ 5ml/sec
- 100 ml contrast @ 5ml/sec
- 100 ml Saline Flush @ 5ml/sec
- 250 PSI
- If necessary, the CT tech can modify the above to suit the patient's IV catheter status

PACS Series:

- Topogram
- 3 mm x 3 mm Precontrast Brain
- 1 mm x 1 mm CTA AX (source images)
- 1 mm x 1 mm COR MIP
- 1 mm x 1 mm SAG MIP
- 3 mm x 1 mm AX Oblique MIP (Brain)



- Patient Protocol/Dose Report

Fig 1

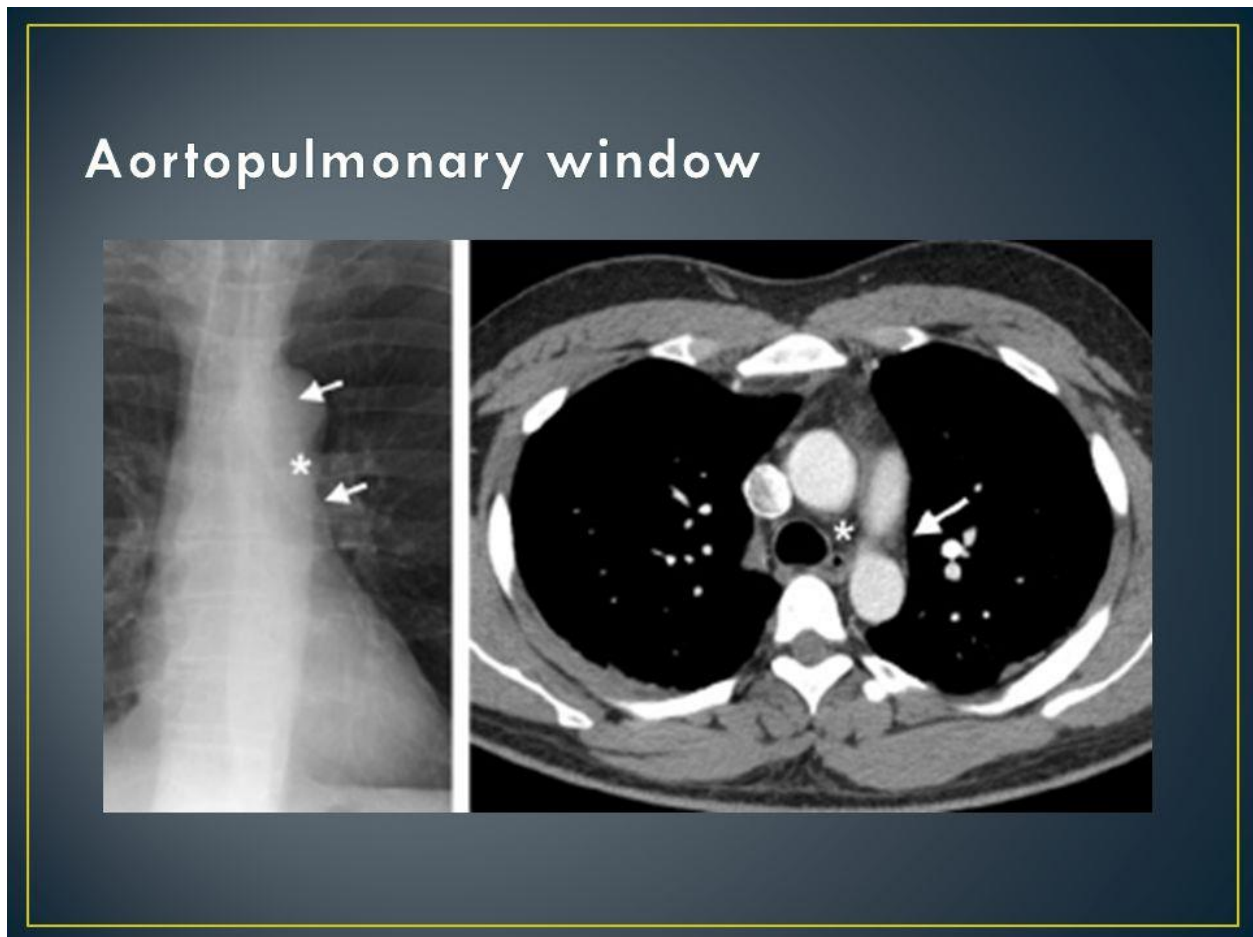


Fig 2: AP window

CTDI: ~ 20 – 50 mGy

Adapted from ARA.