

Bryan Radiology Associates
CTA 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

Exam:

- CT Brain without contrast
- CTA Head Only
 - Scan from C1 to approx. 0.5 mm superior to outer table of skull vertex (no angle) (fig 1)
 - Smart Prep or Bolus Tracking in the aortic arch (trigger set to 60 HU on Siemens) (50 HU on GE)
 - 10 second monitoring delay on Bolus Tracking/Smart Prep

Contrast:

- 50ml of 320- 370 mg iodine/ml non-ionic contrast (e.g. Isovue 370 or Omnipaque 350) @ 5ml/sec with an 18 gauge catheter
- If unable to access an 18 gauge, please use a 20 gauge and adjust to 4ml/sec

Injector Setup:

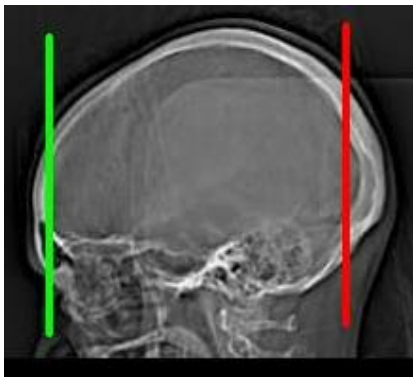
- 30ml Saline Flush @ 5ml/sec
- 50ml contrast @ 5ml/sec
- 100ml Saline Flush @ 5ml/sec
- 250 PSI
- If necessary, the CT tech can modify the above to suit the patient's IV catheter status

PACS Series:

- Topogram
- 3 mm x 3 mm Precontrast brain
- 1 mm x 1 mm CTA AX source images
- 1 mm x 1 mm CTA COR MIP (fig 2)
- 1 mm x 1 mm CTA SAG MIP (fig 3)
- 1 mm x 1 mm CTA AX Oblique MIP (fig 4)
- 3 mm x 3 mm Post contrast brain
- 3 mm x 3 mm Bone **kernel** (Only needed on the post contrast brain)
- Dose Report



Fig 1: scan range



mm COR MIP

Fig
1 x

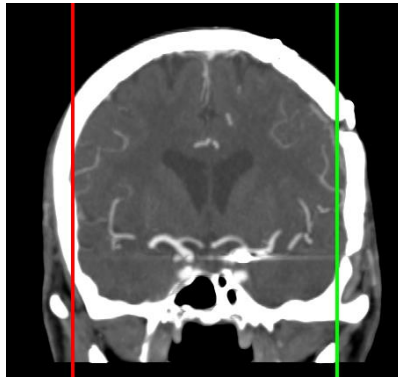


fig 3: 1 x 1 mm SAG MIP

2:
1

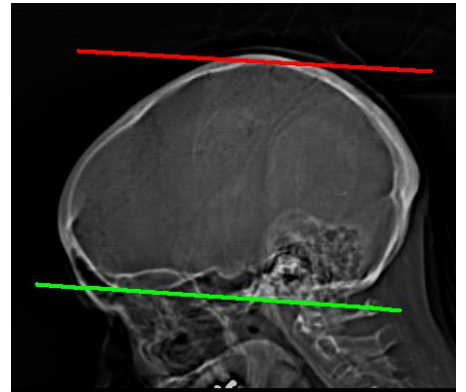


fig 4: 3 x 1 mm AX oblique MIP

CTDI: ~ 30 -50 mGy

Adapted from ARA