

**Bryan Radiology Associates**  
**CT BRAIN W/WO**

Last update: 2021-01-03 JN

**Setup:**

1. Supine, AP and lateral scouts, no gantry angle
2. Patient Positioning: Tilt the patients head so that a line connecting the lateral canthus of the eye and the EAC is perpendicular to the CT tabletop (see fig 1). Angle the gantry if unable to position head within 15 degrees of proper setup angle.

**Contrast:**

100 ml of 320 – 370 mg/dl non-ionic contrast (e.g. Isovue 370 or Omnipaque 350) @ 2 ml/sec

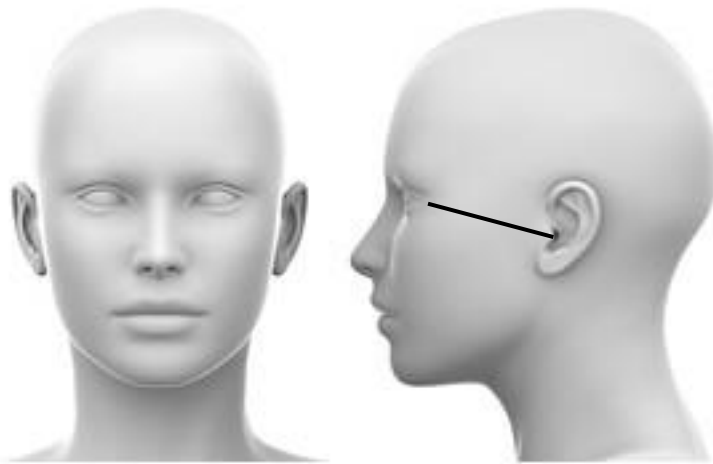
**Scan:**

1. Helical (unless gantry was tilted)
2. Scan range: approx 0.5 cm inferior to skull base (fig 2) to approx 0.5 cm superior to outer table of skull vertex (fig 2)
3. DFOV: Preferred 20 cm (Range 18-22 for adult; 15–22 for pediatric)
4. Inject IV contrast: 100 mL for adult (titrate to weight for pediatric)
5. Wait 5 minutes
6. Repeat scan.

**PACS:**

- Topogram
- 3 x 3 mm brain precontrast AX
- 3 x 3 mm brain post contrast AX
- 3 x 3 mm bone **kernel** (not just bone window) post contrast AX
- 3 x 3 mm brain post contrast COR
- 3 x 3 mm brain post contrast SAG
- (2.5 x 2.5 mm for all planes for pediatric age < 10)

See next page for diagrams.



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Fig 1

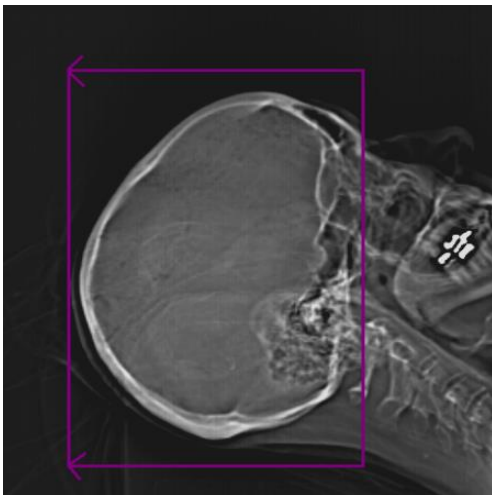


Fig 2 (source: ARA)

CTDI: ~35-60mGy (do not exceed the ACR recommended 75mGy)

Adapted from ARA