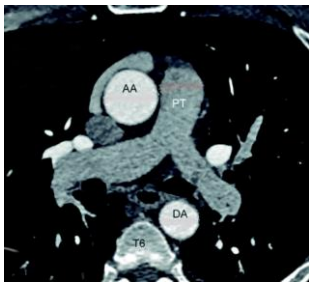
- Auto Send study to PACS; A portion will be sent to TeraRecon (no box 5)
- Perform HeartFlow Protocol Reconstruction
  - Only send Images to HeartFlow if ordered
  - Most typical phase requested is 70th phase of Heartbeat
  - Different phases may be specified by Cardiologist
- Gated study
- Use ECG Electrodes

*Set up CTA scan like a calcium score. Targeted field of view is no greater than 250.
*If patient had graft/bypass, do not do a calcium score. If the patient has a graft, the scan range will be longer. Make sure you scan above the shoulders.
*If patient is large, change Safire to 3 and use 6ml per second injection instead of 5ml.
*100ml Omnipaque 350 and 100ml 0.9 Sodium Chloride (Normal Saline)

1. Under Cardiac folder, choose Coronary CTA Heart
2. Do both Scouts
3. Do calcium score & recon (reconstructions used to find trigger point)
   a Calcium Score reconstructed in 2 x 2
4. Find ascending aorta (will usually be above left atrium on axial view). Place pre-monitor on that slice and take the image.



5. Ascending aorta should be visible in image. If not, right click on ”Pre Monitor”, repeat and adjust up or down. Once correct slice is found, place ROI.
6. Perform pre-monitor scan (start injector and CT scan simultaneously)
7. Trigger card (bottom right)-graph shows contrast intensity (linear, in HUs) during injection and scan; when graph line shows decline, end scan.
8. Find highest HU #, look for time in seconds, add 4 seconds. This is the <u>delay time</u> for scan. For patients with grafts, start scan above the aortic arch and do not add 4 seconds.
9. Instruct nurse to give nitro and wait 5 minutes.
10. Scan patient.
11. Do calcium score on TeraRecon and validate.
    a Calcium Score portion reconstructed in 2 x 2
    b There are 7 boxes to the CTA portion of the study
       i Boxes 1-4: 0.75 slice thickness; kernel Bv38; window Cardiac (PACS/TeraRecon)
          1 These 4 boxes contain the data acquisition boxes and best diastolic and systolic ranges
       ii Box 5: Renstructed at 0.75 mm slice thickness, kernel Bv45; Window Cardiac.

1. This box contains the 70th phase and most commonly the phase sent to HeartFlow. **Not sent to PACS or TeraRecon – only to HeartFlow upon request.

iii. Boxes 6-7: 5 x 5 lung axials. The ST series has a Br40 kernel and mediastinum window. The lung series has a br59 kernel and a lung window. (PACS)

12. Always protect the data file
13. Log patient in the CTA Coronary log book.
14. If FFR is indicated, the cardiologist will instruct that the images be sent to HeartFlow with the heart phases specified. Coronary CT scans cannot be sent to HeartFlow without an authorization.
15. If the FFR Cardiac passes, put the billing codes in IDX. Do not charge for a FFR study if the CTA Coronary scan fails.
16. All CTA Coronary heart studies are to remain on the CT Scanner with raw data for 7 business days, after which they can be deleted

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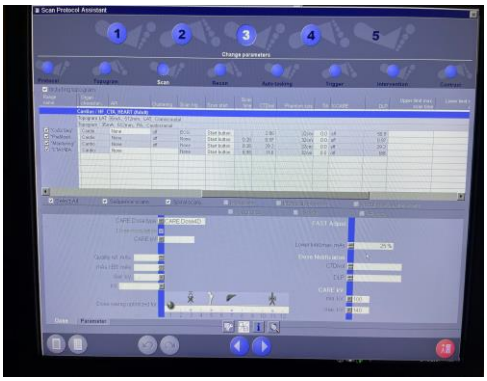

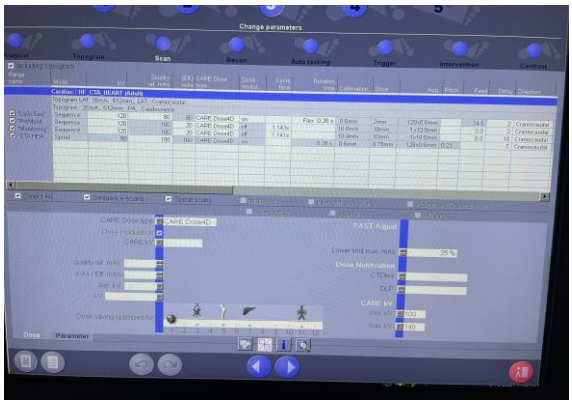

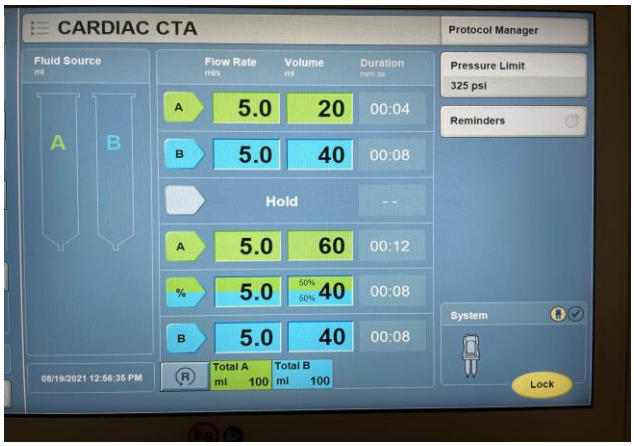

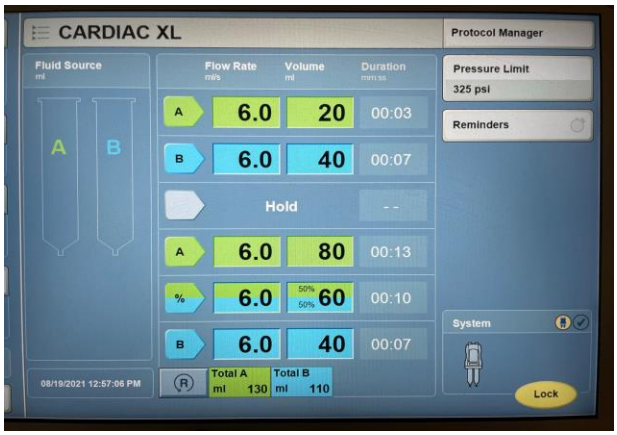

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