

CT Department Work Flow Tip Exam: Calcium Score

QDOC Exam Code: [CCACS](#)

Protocol required

Systems: 64 slice to 256 slice

Protocol Location:



Exam:



Calcium Score Prep and Set up

Pt Prep.

- No Caffeine 24hrs prior to exam.
- Check Pt. BMI before Exam (technique is BMI based) .

• <http://www.nhlbisupport.com/bmi/>

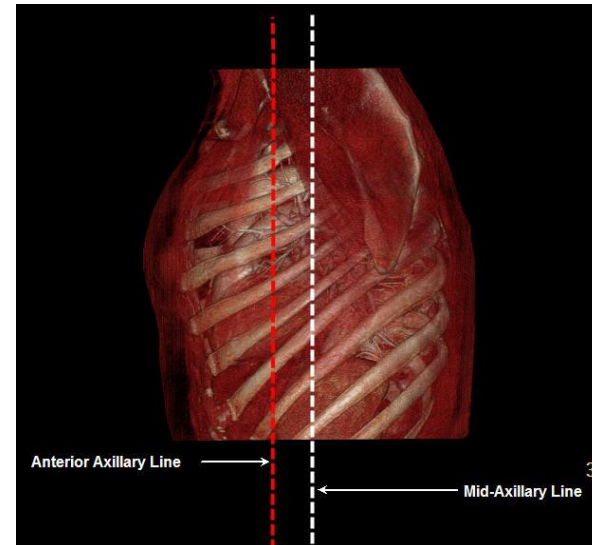
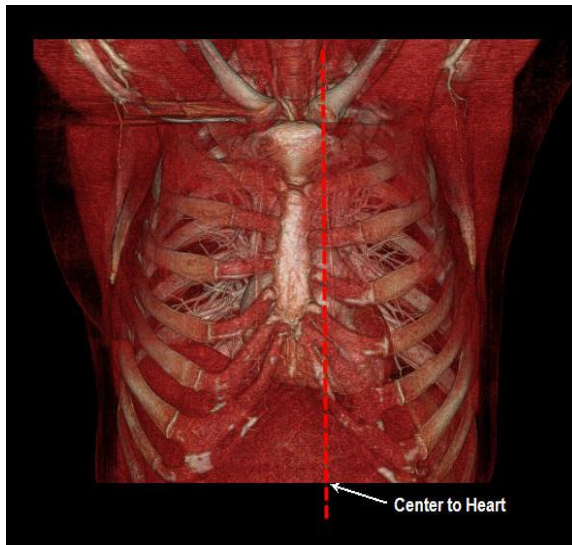
<20 bmi	=	120kv @ 55mAs	20 - 25 bmi	=	120kv @ 70mAs
25 - 30 bmi	=	120kv @ 80mAs	30 - 35 bmi	=	120kv @ 100mAs
		35 - 40 bmi	=		120kv @ 120mAs

Range for technique from 55-120mAs. Any parameter outside of this will cause the Calcium Score Application not work correctly.

- Pt dressed in gown opening to back, t-shirt expectable if a nonprint.

Patient Position/Centering

- Pt is positioned on table so that heart is in Isocenter with arms above head. Center Pt to mid-heart and Anterior Axillary Line, pt will feel off center on table.



Patient Preparation – ECG Signal

Set up the ECG Monitor Prepare electrode contact sites

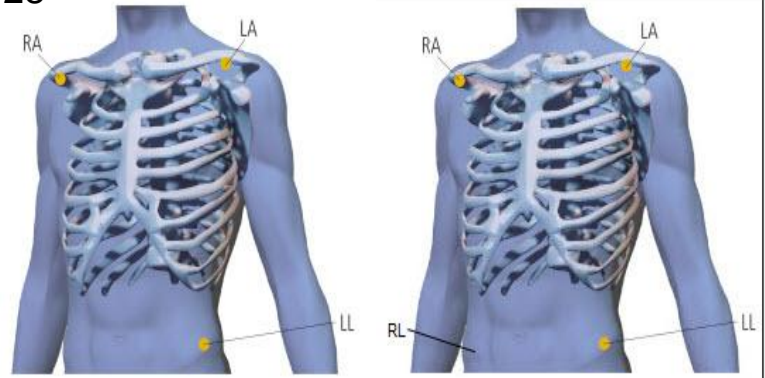
- Have the patient assume the posture for the scan; raise the hands above the head.
- Use the wet-gel electrodes pads (not dry) for better contact with the skin.
- Clean the contact sites thoroughly to ensure good electrode contact with the skin. *use soap and water, NOT alcohol*
- Attach the ECG leads to hairless area on the chest or back; shave area if necessary.

Place electrodes

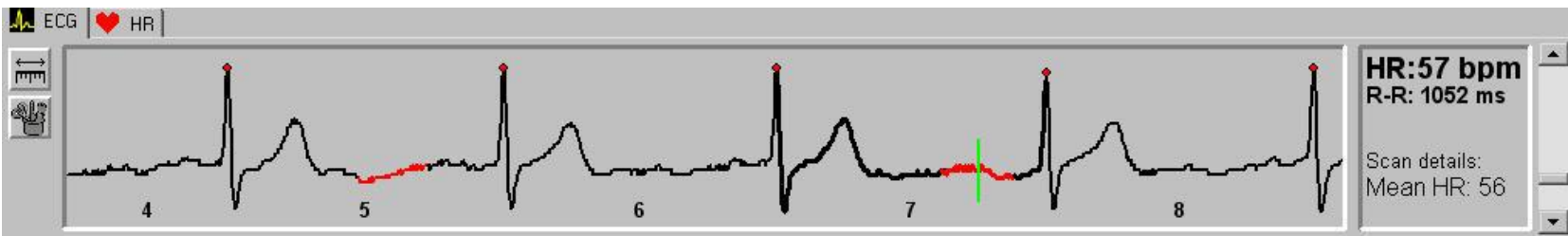
- (RA **white**) Right upper chest-below clavicle over intercostal space
- (LA **black**) Left upper chest -below clavicle over intercostal space
- (LL **red**) Left mid-abdomen
- (RL **green**) Right mid-abdomen(iCT)

Connect leads to electrodes

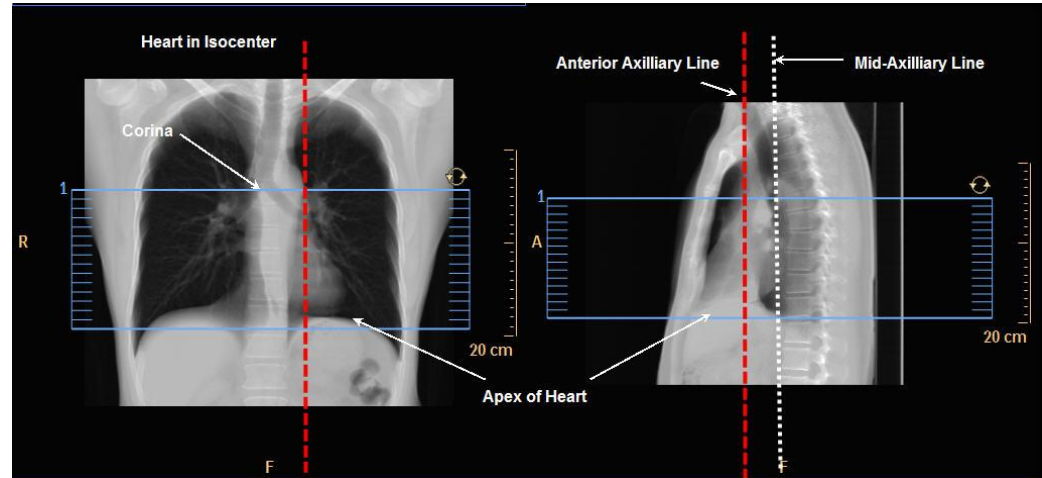
Br 64/128



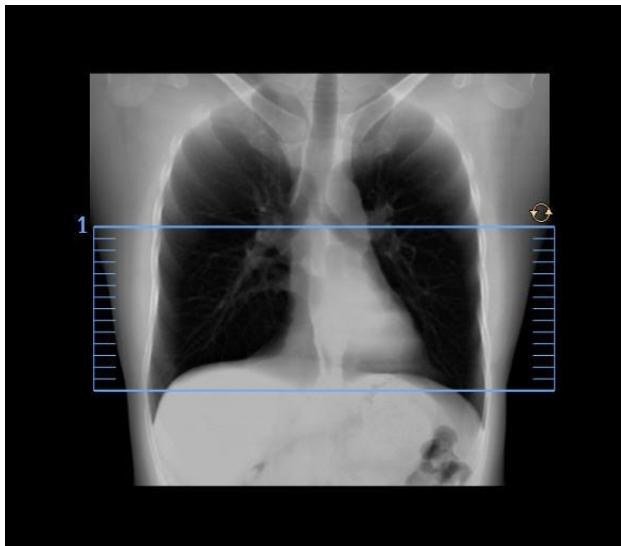
- Optimal heart rate 60 – 70bpm, since this is a nonmedicated exam, do your best to try and get the pt to relax with calm breathing before starting exam.



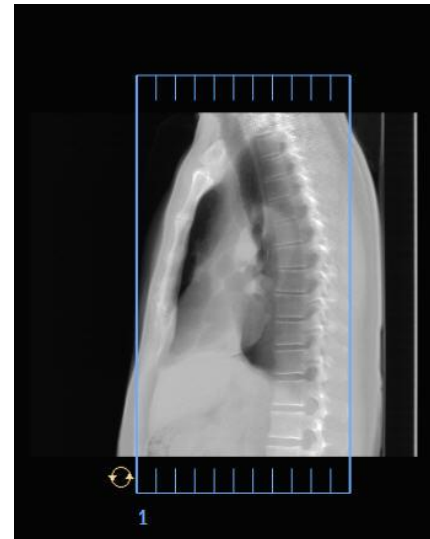
1. **Scout:** AP(180) 350mm – 400mm
(Center Patient's heart Isocenter on Table)
- Breath Hold: inspiration
2. **Calcium Score:** 2.5mm x 2.5mm
Axial Gated
From Corina to Apex of Heart.
3. **Recons Lung Thins:** 1.5mm x .75mm
MPR:
Axial 3mm x 1.5mm
Coronal 3mm x 1.5mm
Sagittal 3mmx 1.5mm
4. **Technique:** 120kv @ 55-120mAs
*see previous slide
5. **IV access:** None
6. **PO Prep:** None
7. **Contrast:** None



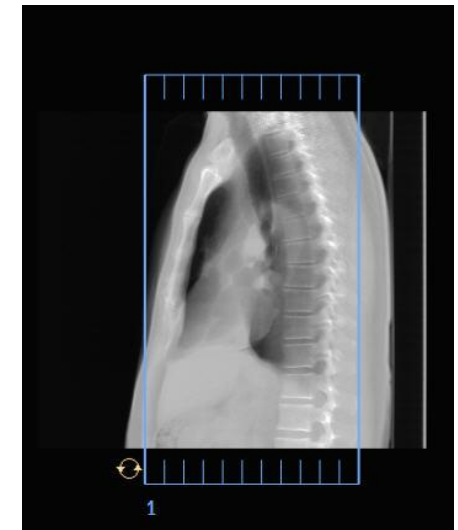
Calcium Score/Axial Lungs



Coronal Lungs



Sag Lungs



Point of Contact

Cardiac Radiologist:	Bardo, Dianna M MD(T,Th,Fr)	pager: 15171
Cardiologist:	Shipiro, Michael D DO (M,W)	pager: 13616
Lead Cardiac:	Bobby Hill (R)(CT)(R)	pager: 14083

- Exams are not protocolled before hand, if order states prepay \$100 then this is a Calcium Score protocol as such.
- Contact Protocoling Cardiologist/Cardiac Radiologist with any questions on protocol.
- When completed send Calcium Score to Workstation for Scoring. Send all others to PACS, except Lung Thins.
- Page Reading Rad when Exam is completed.