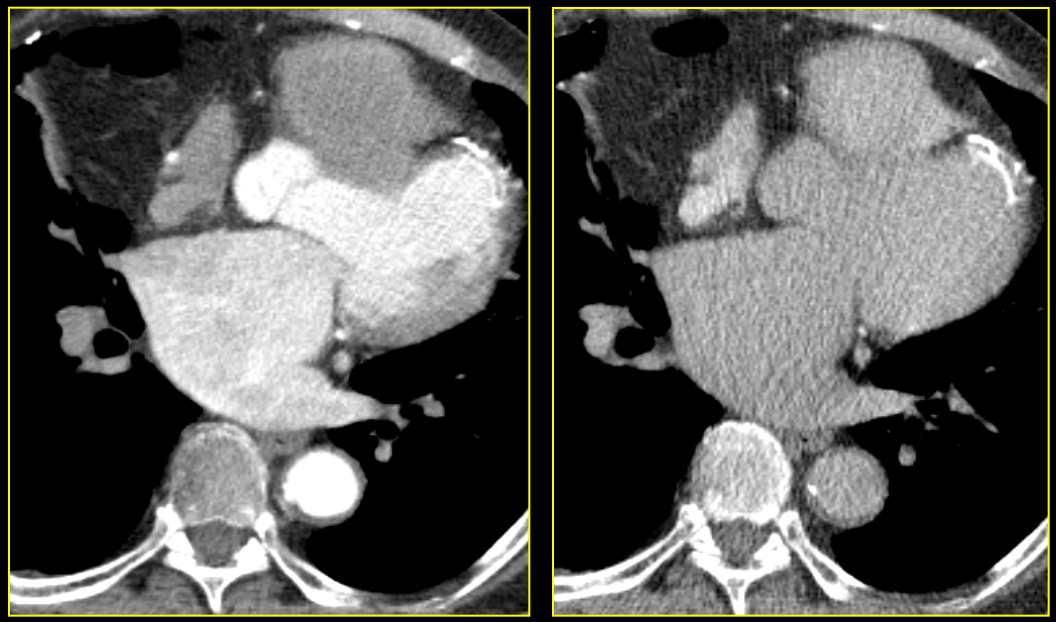
Web Chapter 3

Image Gallery: Lesion detection on low dose chest CT



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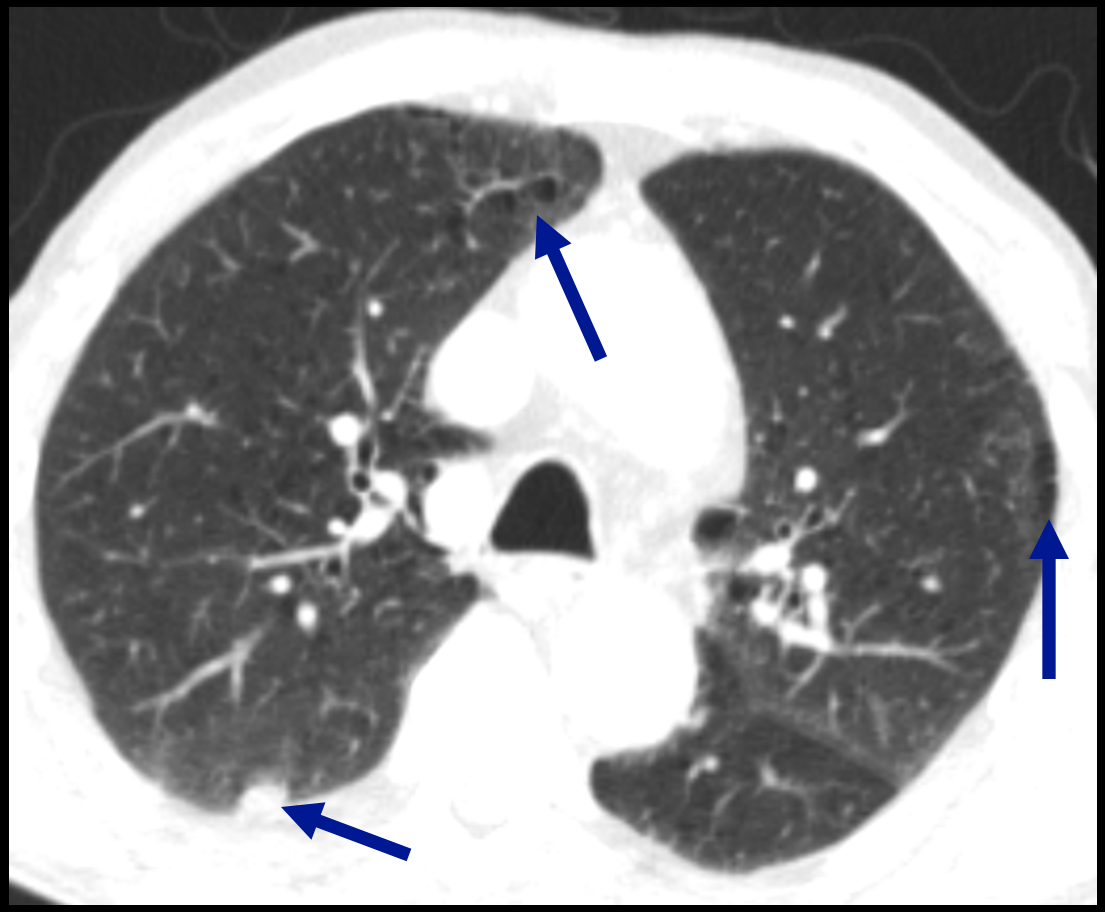
Do you see any abnormal findings in this transverse CT image?



Do you see
a nodule in right lower lobe,
paraseptal emphysema, and
centrilobular emphysema?

Do you see any additional finding in higher dose images ?

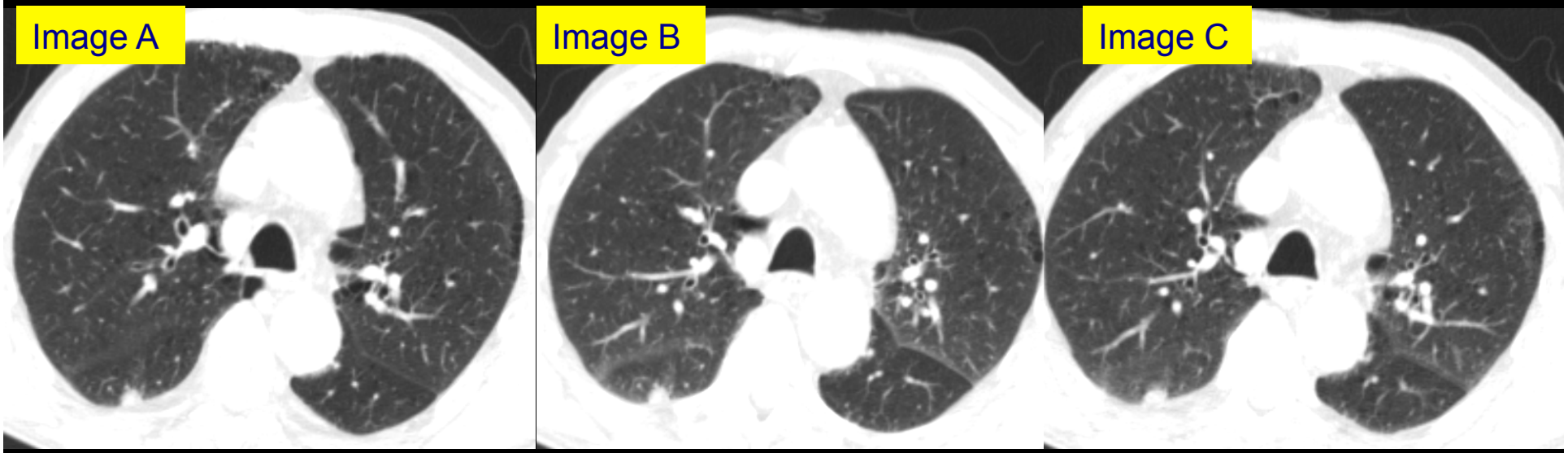


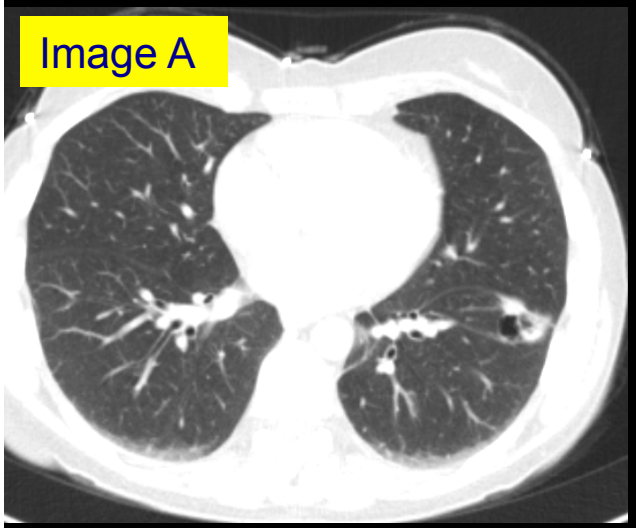
Image A	Image B	Image C
114 mAs	87 mAs	40 mAs
CTDIvol: 7.7 mGy	5.9 mGy	2.8 mGy

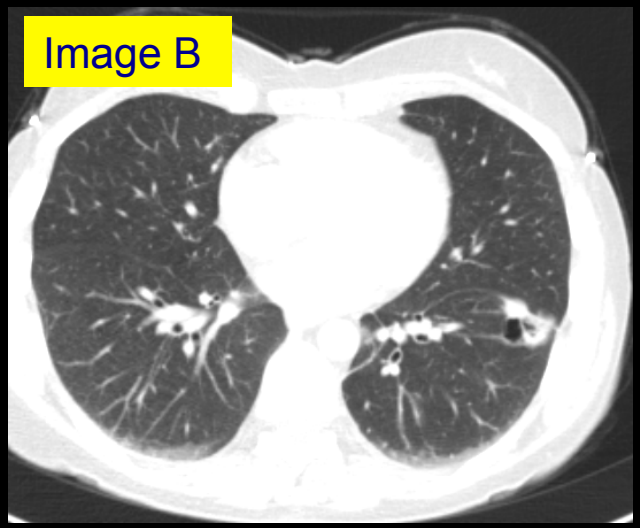
nodule in right lower lobe,
paraseptal emphysema in the left lung,
centrilobular emphysema

Do you see any abnormal findings in this transverse CT image?

Do you see..
Solid and cystic lesion in left lower lobe abutting the major fissure,
ground glass opacity lateral to descending aorta,
dependent atelectasis bilaterally?

Do you see any additional finding in higher dose images ?





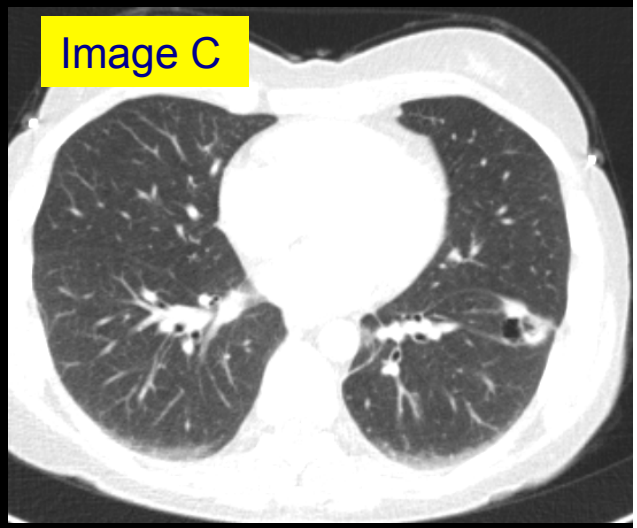
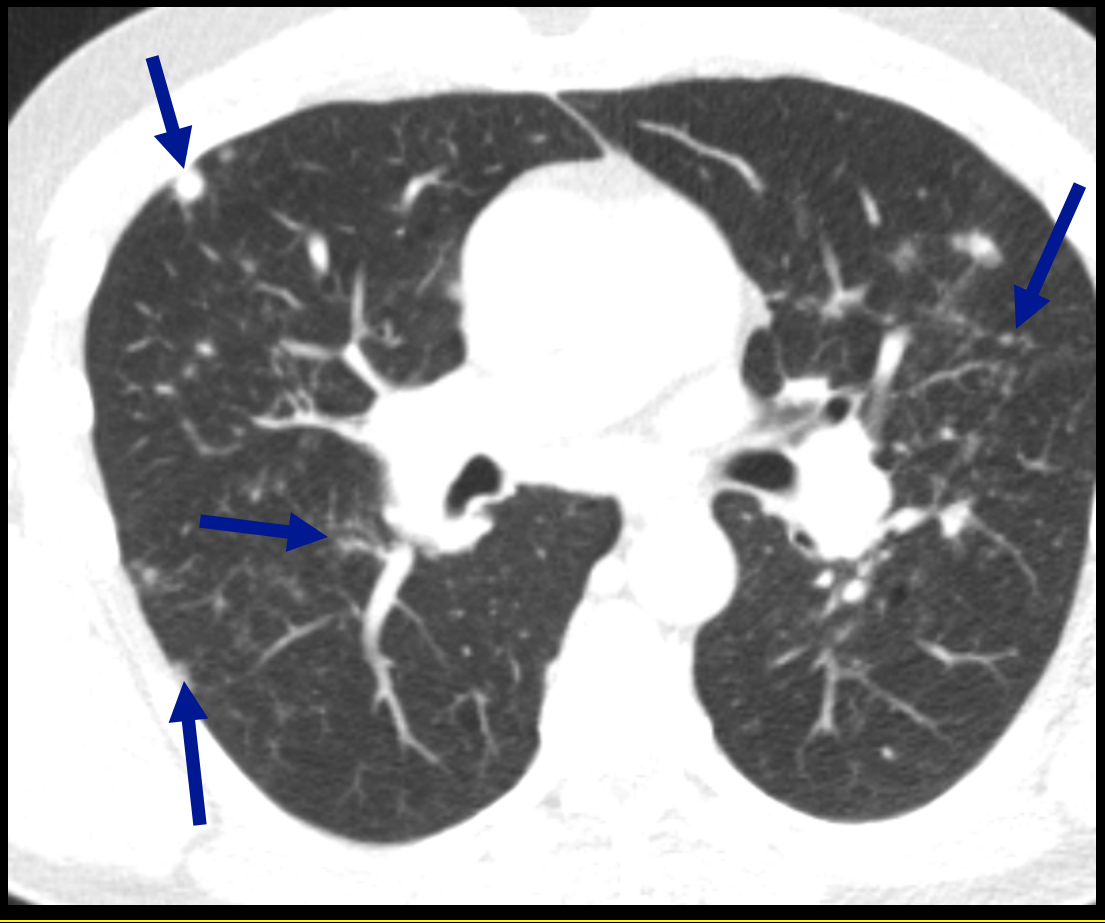


Image A	Image B	Image C
64 mAs	56 mAs	23 mAs
CTDIvol: 4.4 mGy	3.8 mGy	1.6 mGy

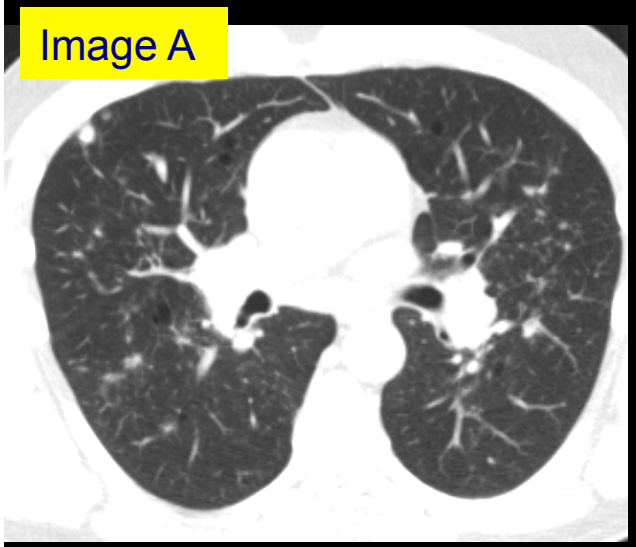
Solid and cystic mass lesion in LLL, ground glass opacity lateral to descending aorta, and dependent atelectasis bilaterally

Do you see any abnormal findings in this transverse CT image?



Do you see multiple peribronchovascular and subpleural nodules consistent with pulmonary sarcoidosis?

Do you see any additional finding in higher dose images ?



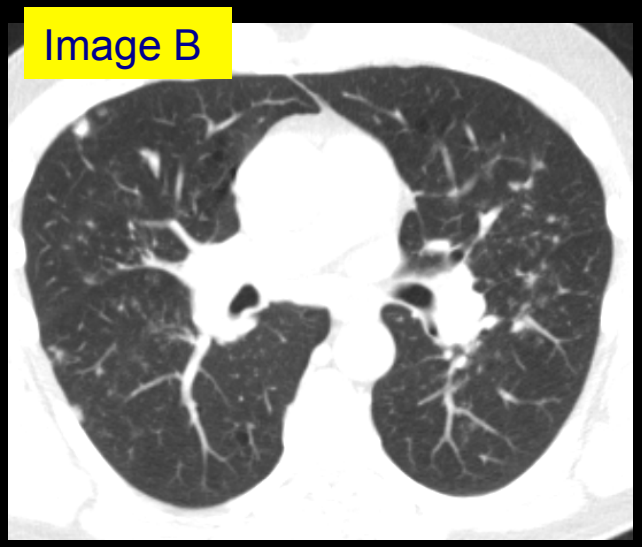
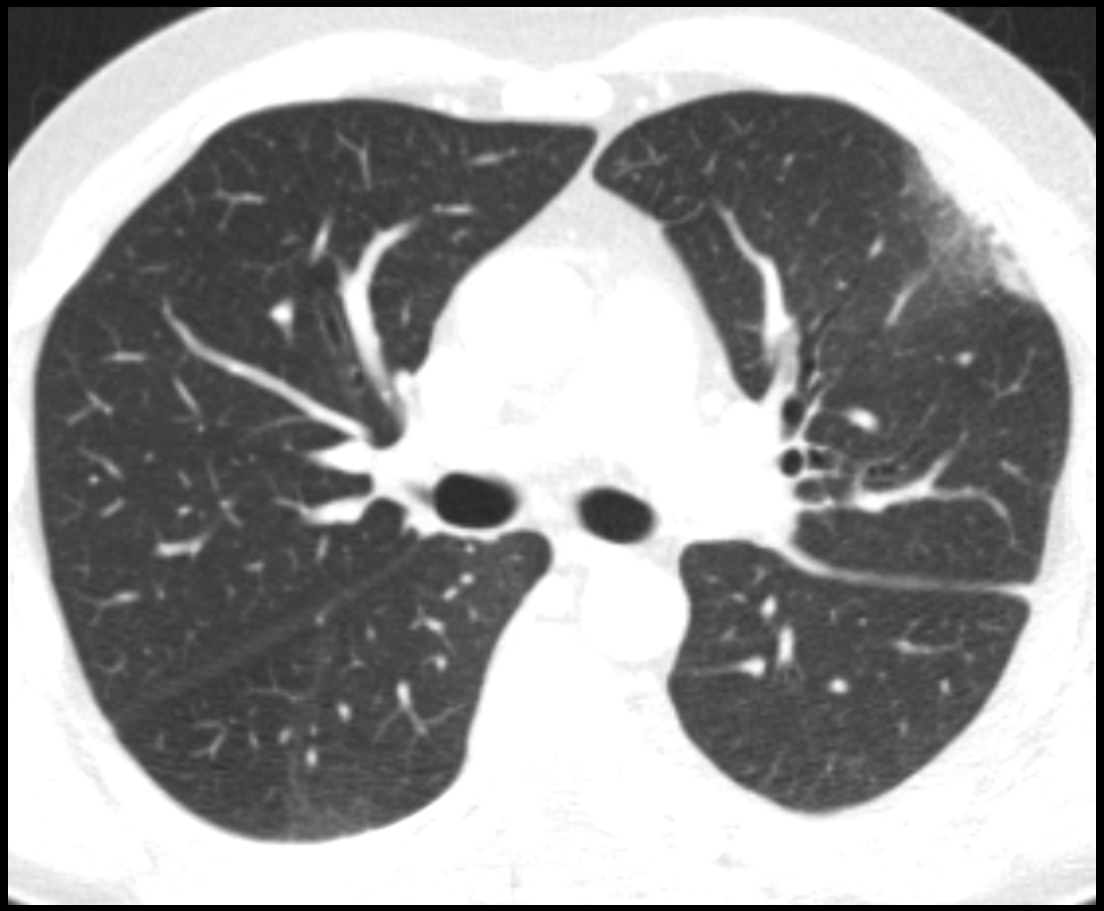
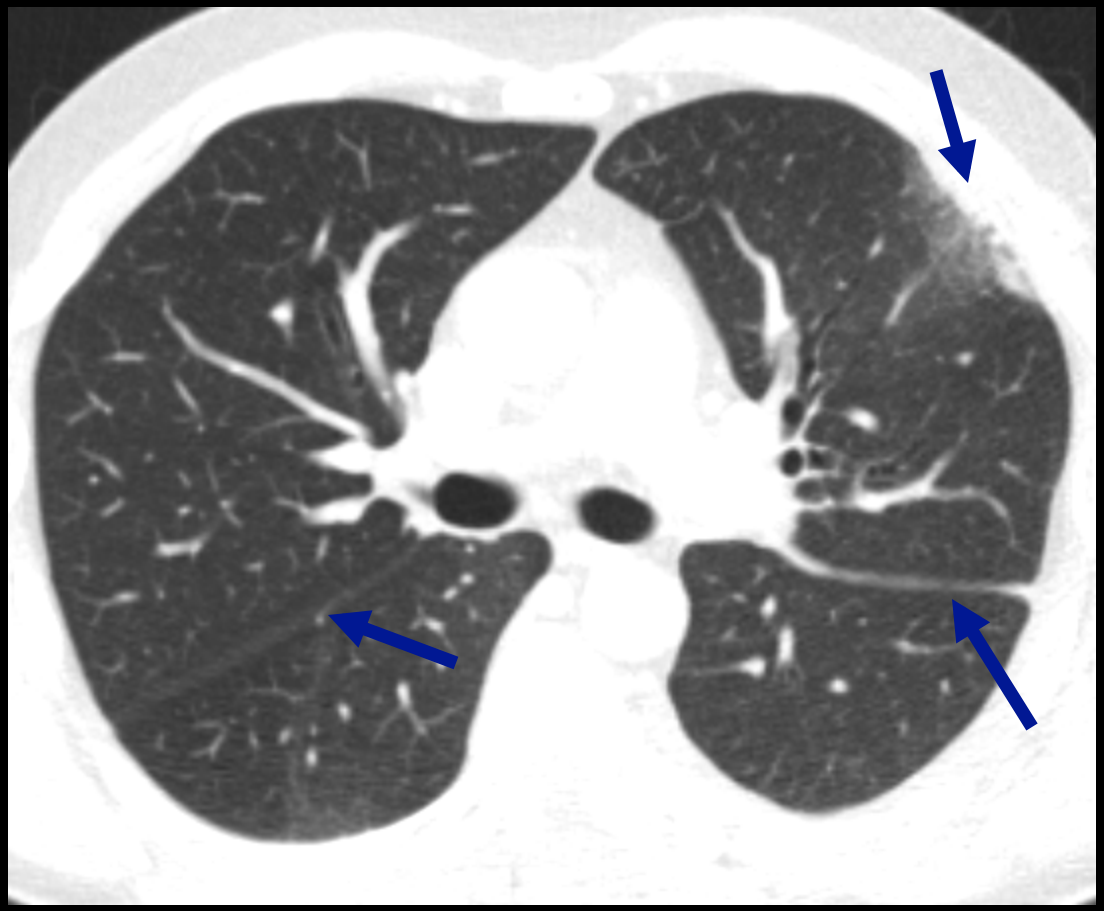


Image A	Image B	Image C
80 mAs	69 mAs	31 mAs
CTDIvol: 5.4 mGy	4.7 mGy	2.1 mGy

Multiple peribronchovascular and supleural nodules consistent with pulmonary sarcoidosis

Do you see any abnormal findings in this transverse CT image?





Do you see subpleural opacity in the anterior left upper lobe,
right major fissure nodule, and
thickened left major fissure?

Do you see any additional finding in higher dose images ?

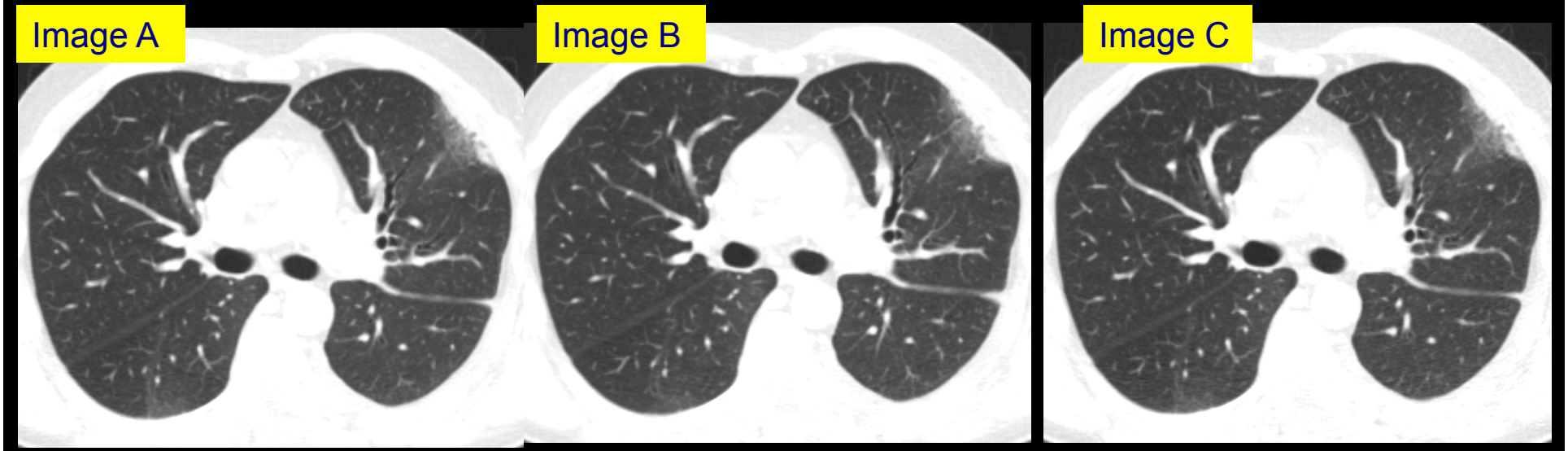
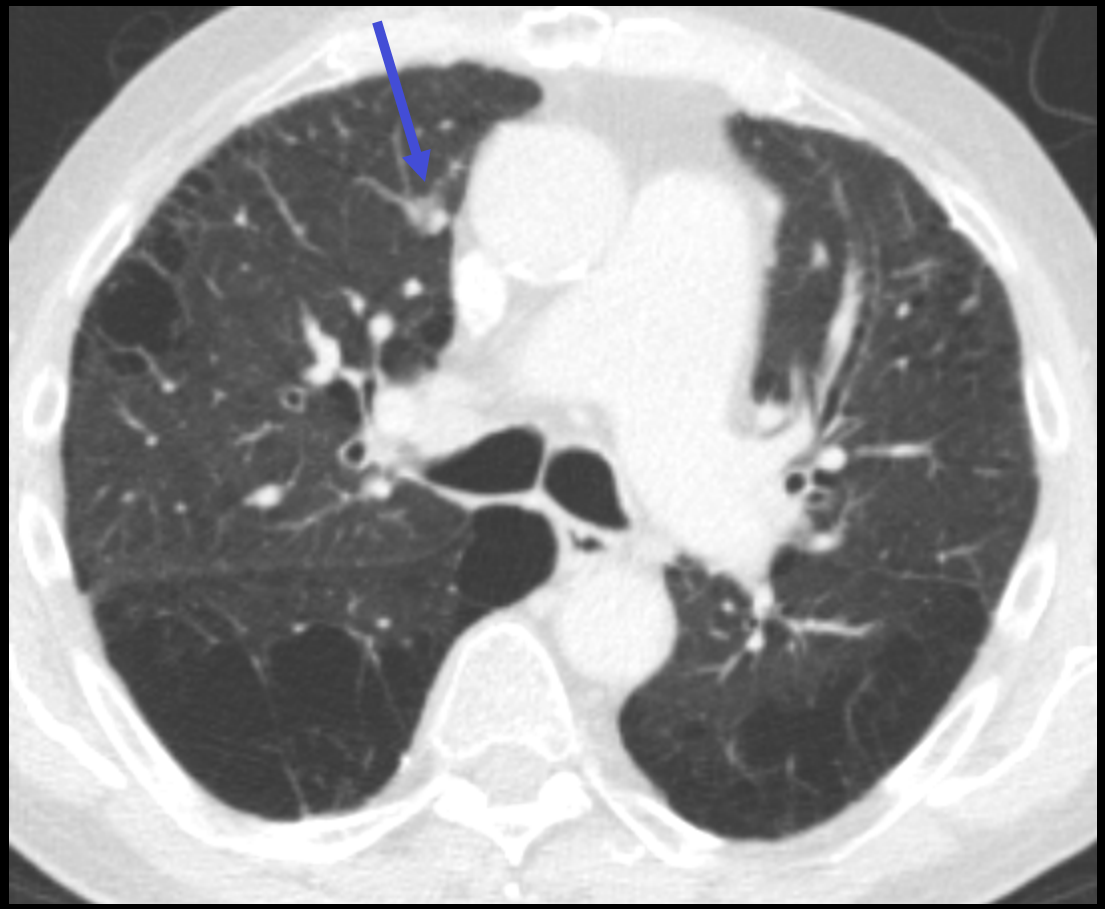


Image A	Image B	Image C
94 mAs	85 mAs	35 mAs
CTDIvol: 6.4 mGy	5.8 mGy	2.4 mGy

Subpleural opacity in the anterior LUL, right fissural nodule, thickened left major fissure

Do you see any abnormal findings in this transverse CT image?



Do you see paraseptal and bullous emphysema, and nodule in the right upper lobe?

Do you see any additional finding in higher dose images ?

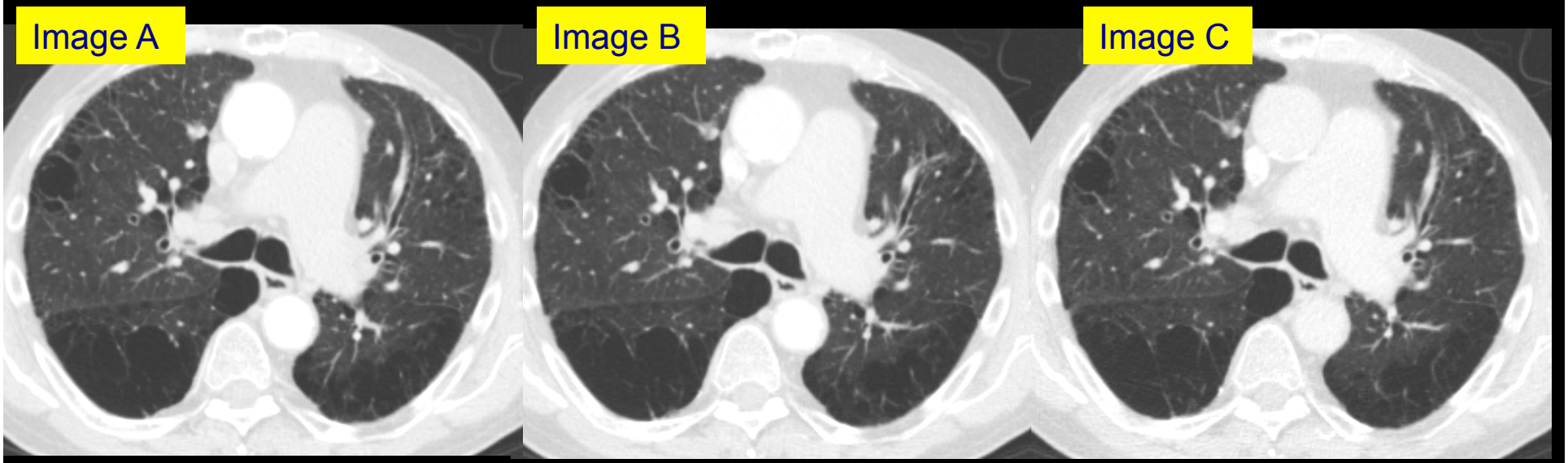
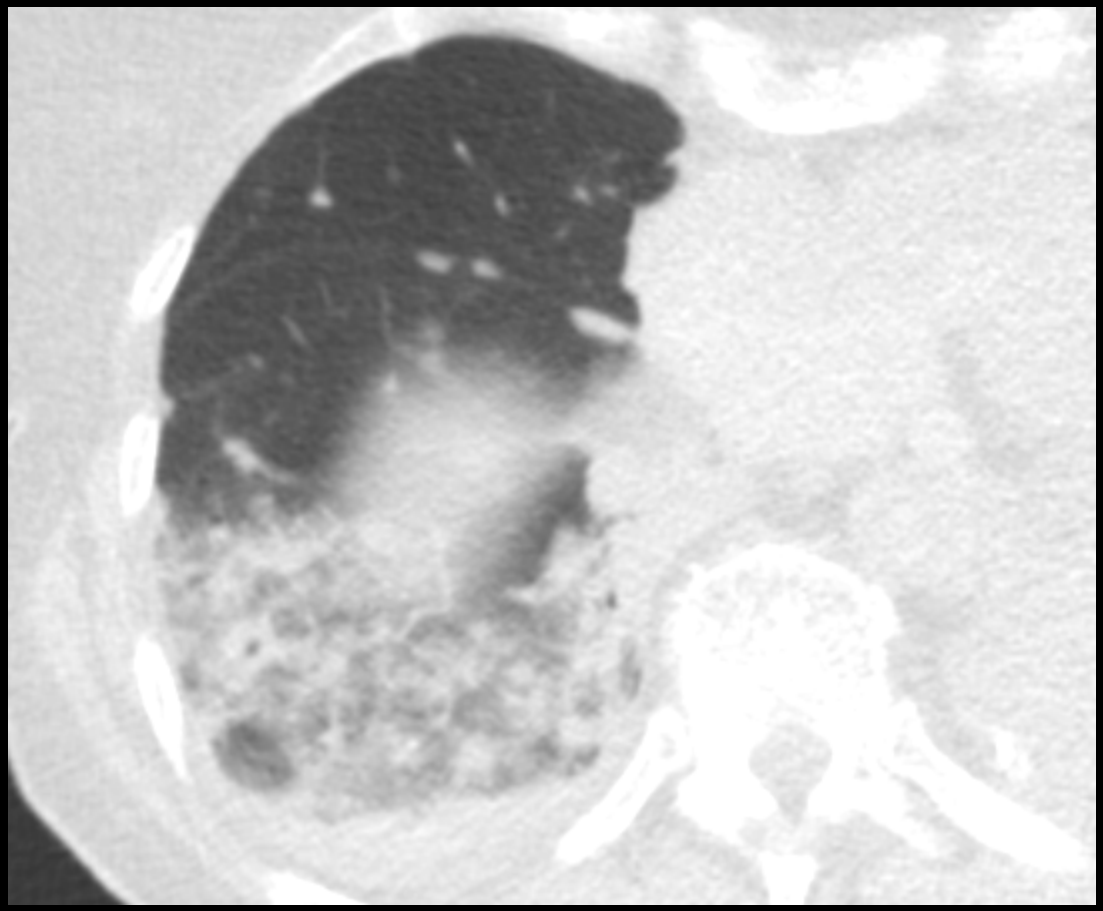
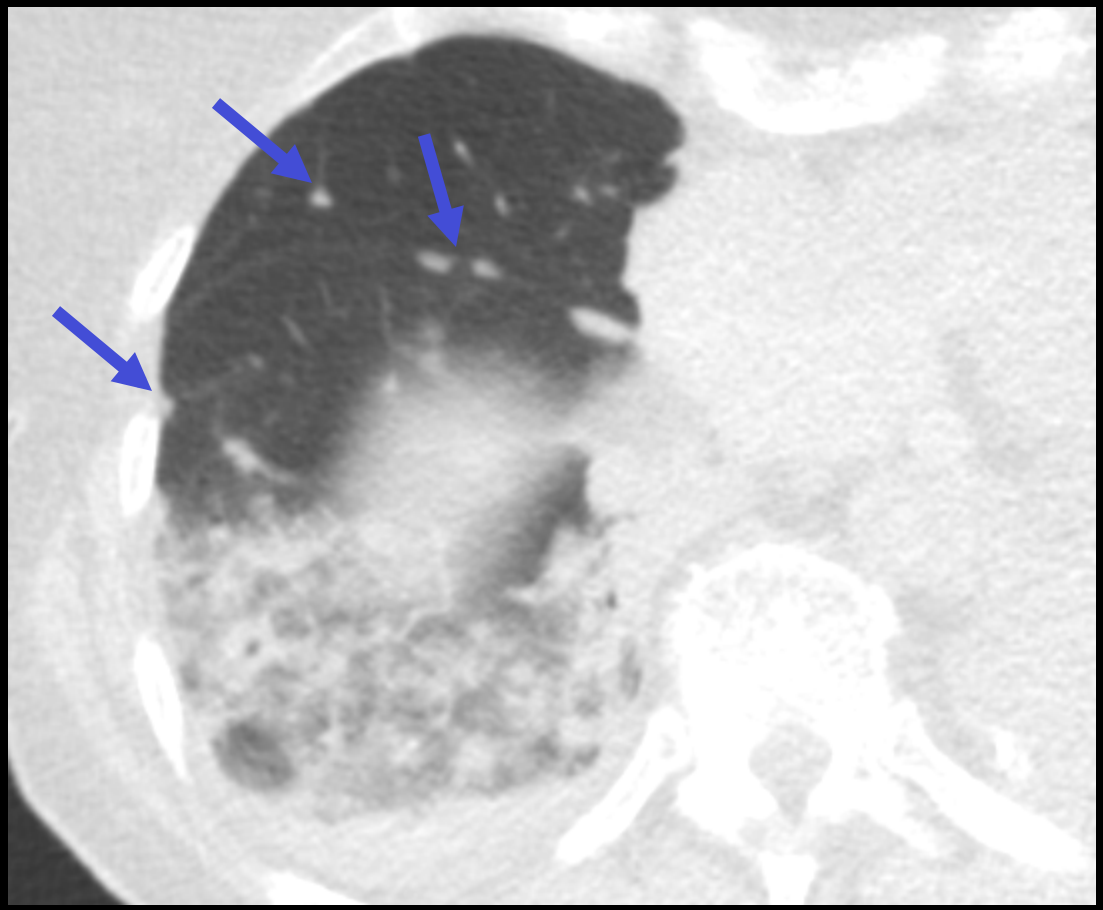


Image A	Image B	Image C
80 mAs	69 mAs	31 mAs
CTDIvol: 5.4 mGy	4.7 mGy	2.1 mGy

Paraseptal and bullous emphysema. Nodule in the right upper lobe.

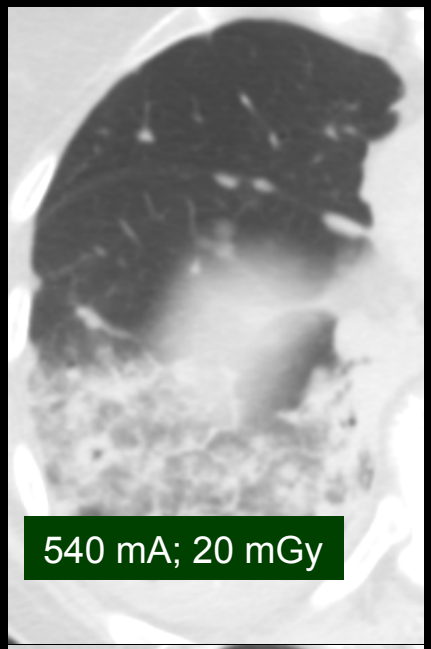
Do you see any abnormal findings in this transverse CT image?

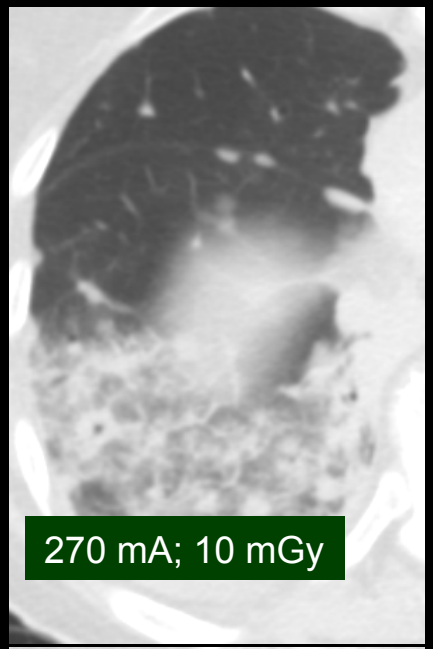


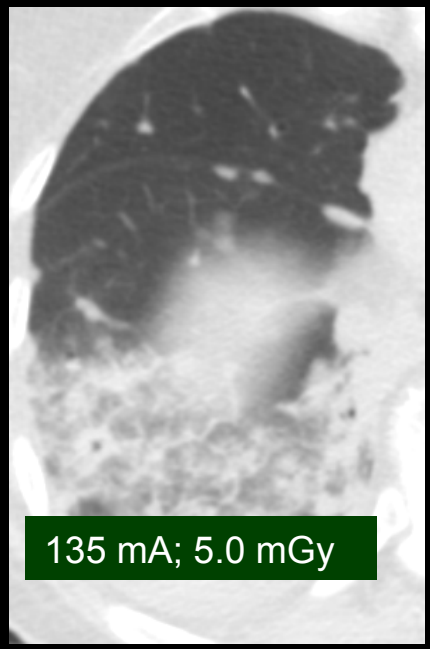


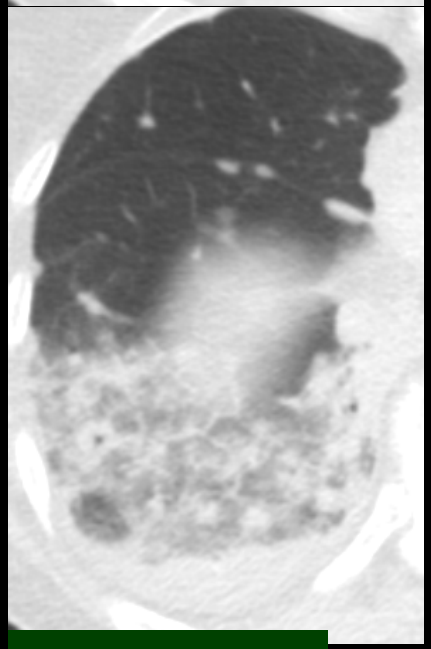
Do you see patchy air space opacity in the right lower lobe,
Multiple right fissural nodules,
and right middle lobe non-calcified nodule?

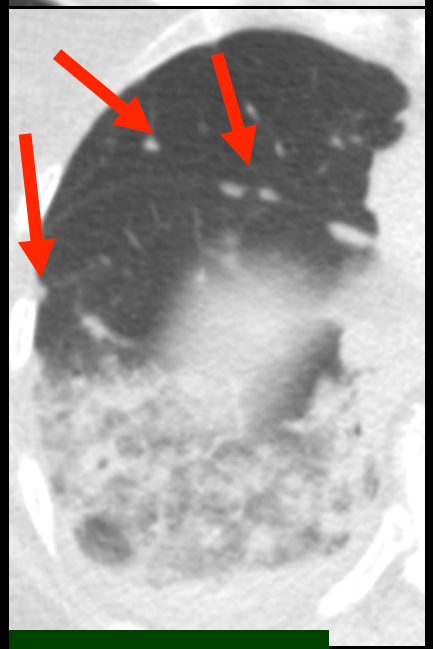
Do you see any additional finding in higher dose images ?





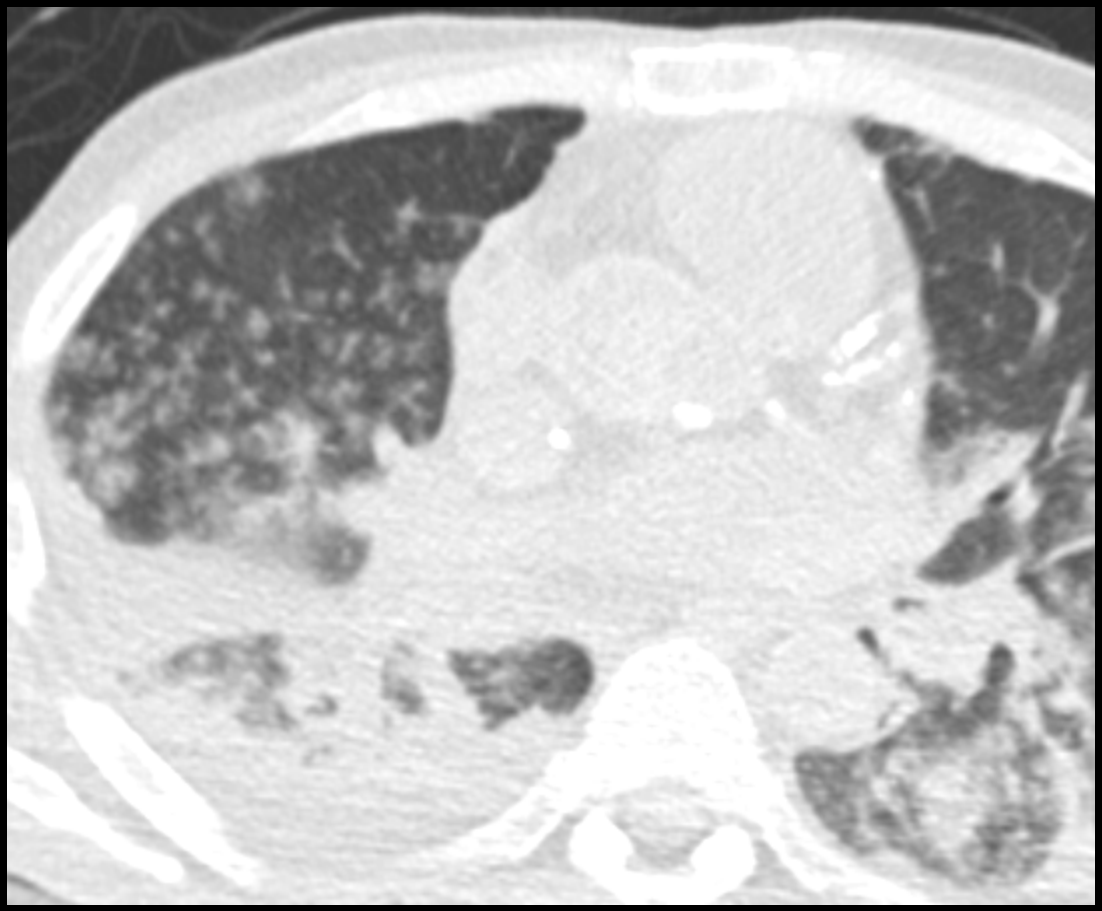


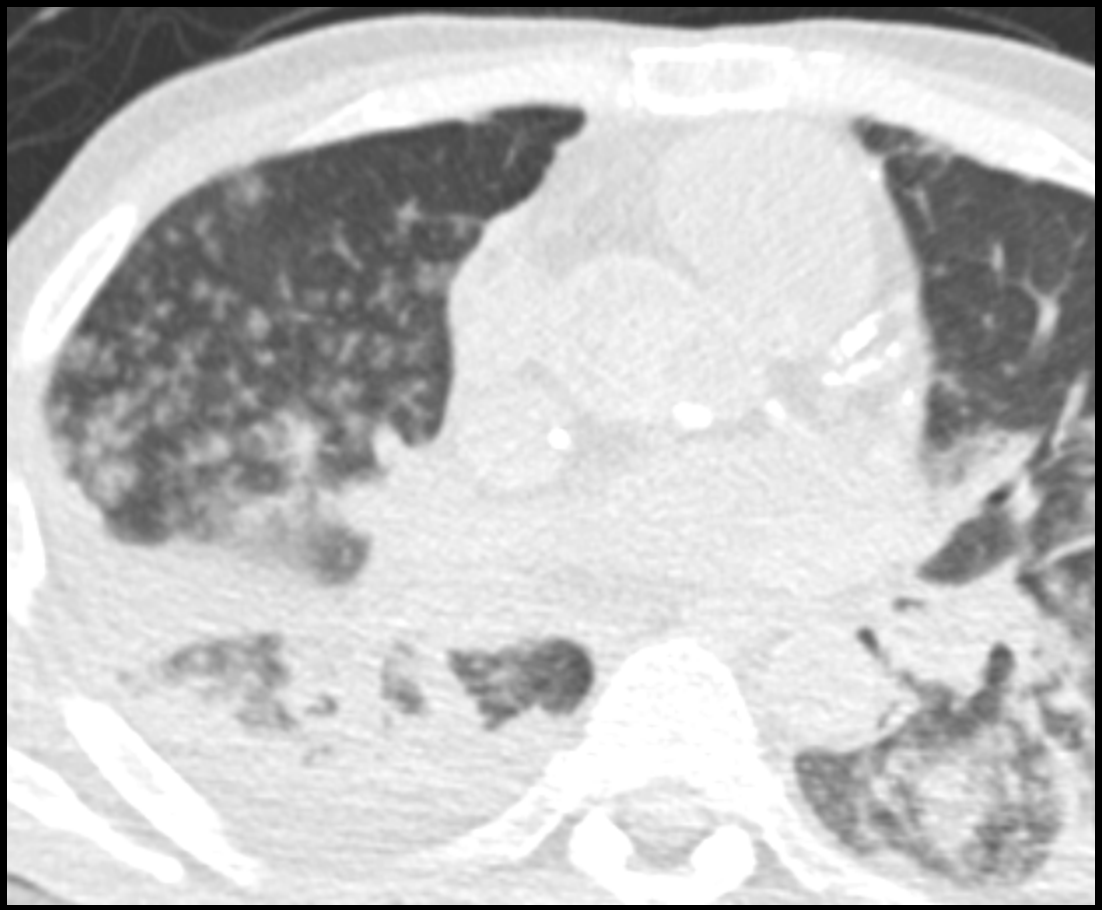




Patchy air space opacity in the RLL
Right fissural nodules
RML nodule

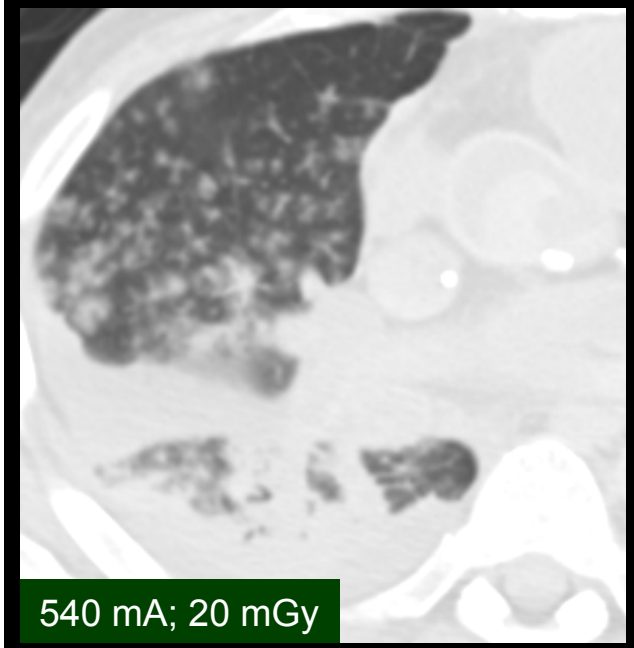
Do you see any abnormal findings in this transverse CT image?

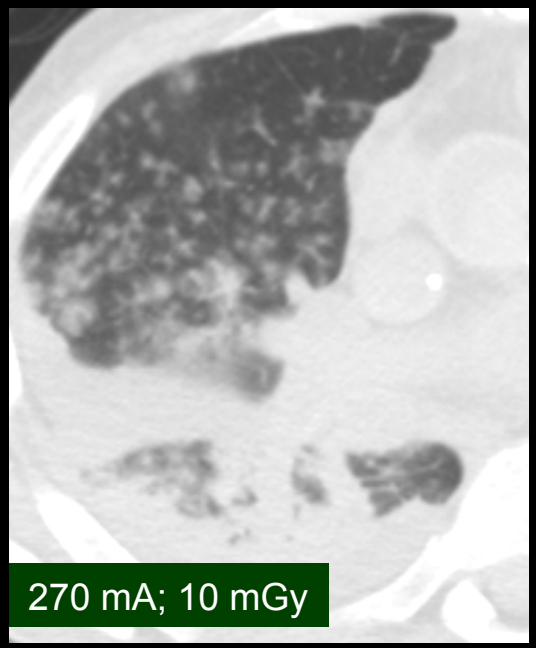


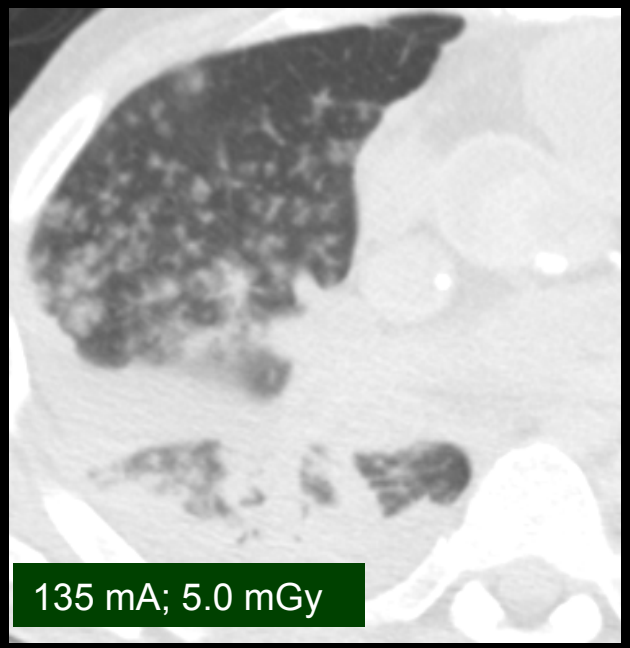


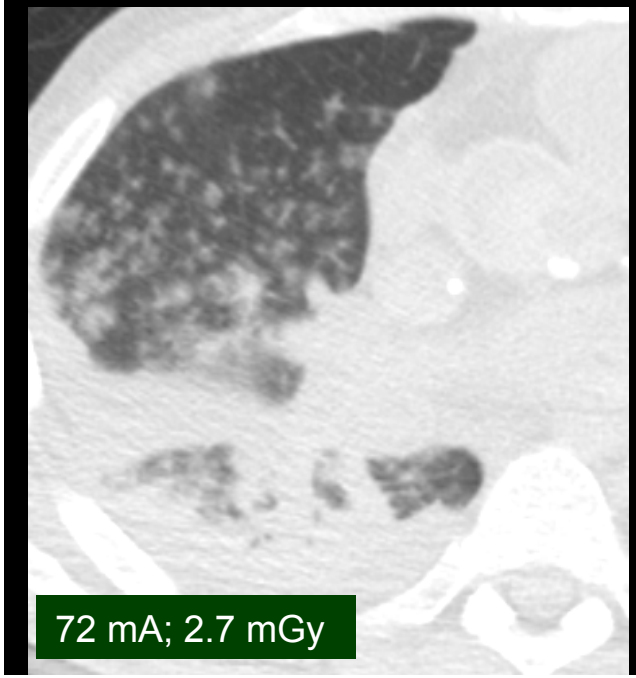
Do you see branching nodular opacities in right middle lobe, patchy consolidation in bilateral lower lobes (right greater than left) and right fissural effusion?

Do you see any additional finding in higher dose images ?



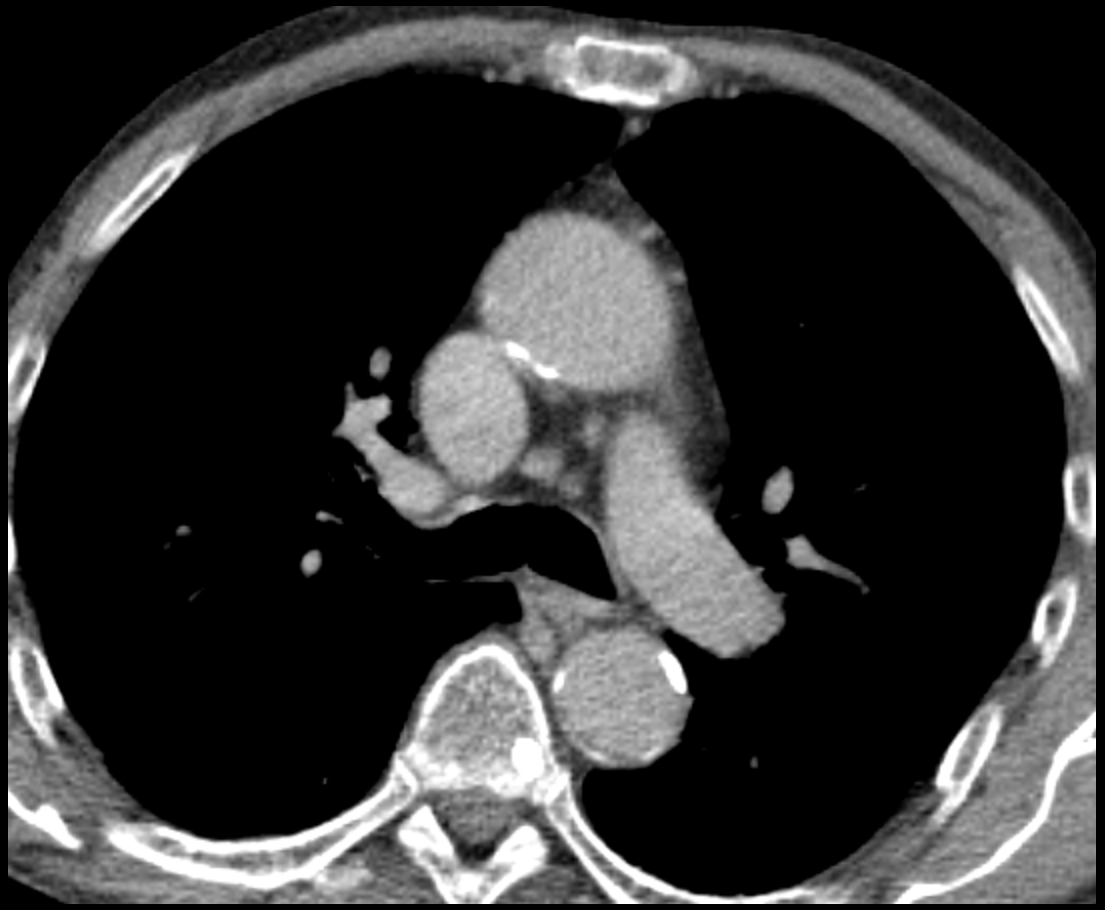


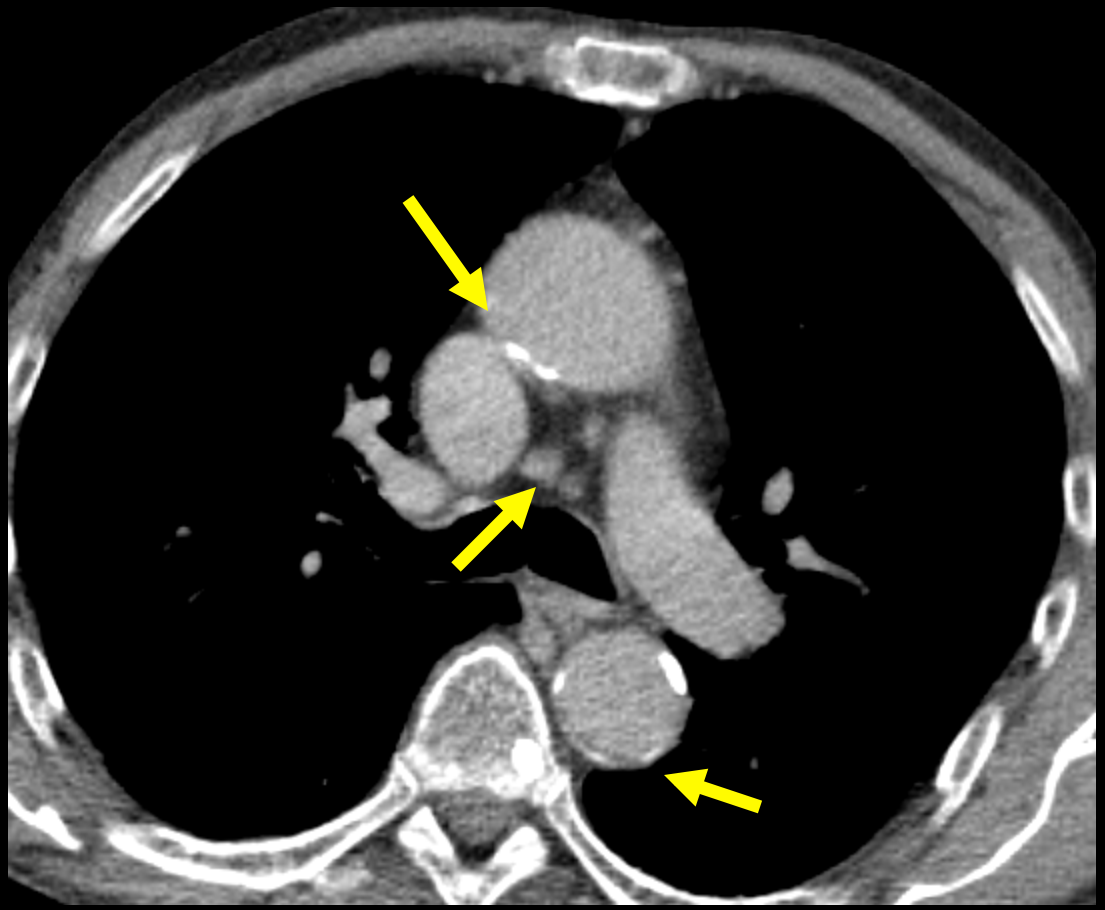




Branching nodular opacities in RML,
patchy consolidation in RLL
right fissural effusion seen at all dose levels

Do you see any abnormal findings in this transverse CT image?





Do you see mediastinal lymph nodes,
and calcified plaques in the ascending and descending thoracic aorta?

Do you see any additional finding in higher dose images ?

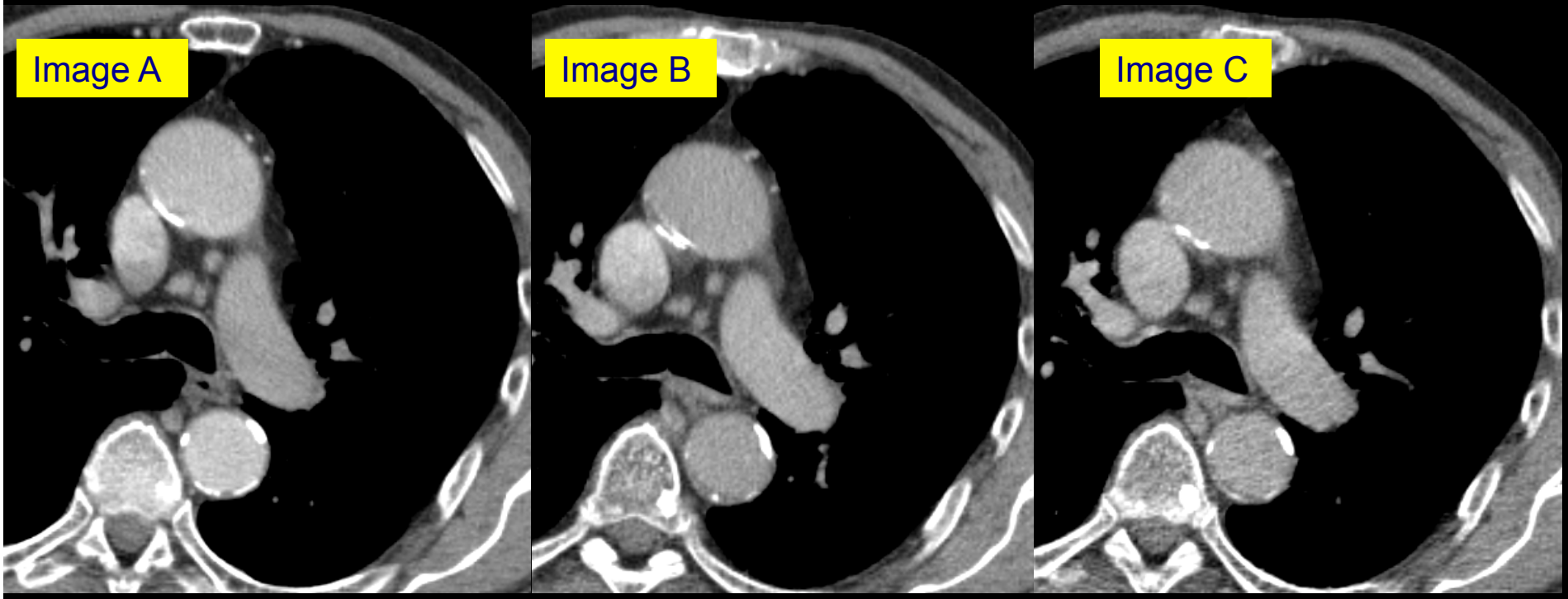
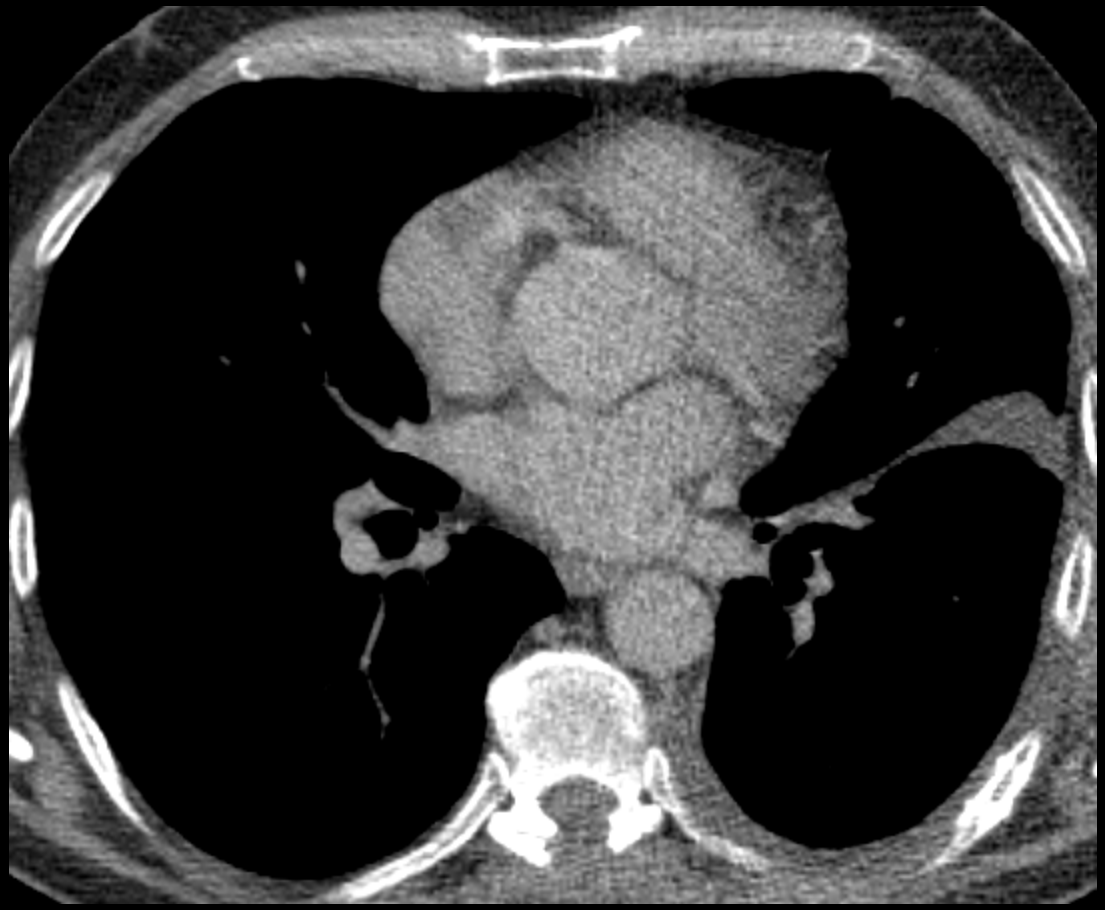
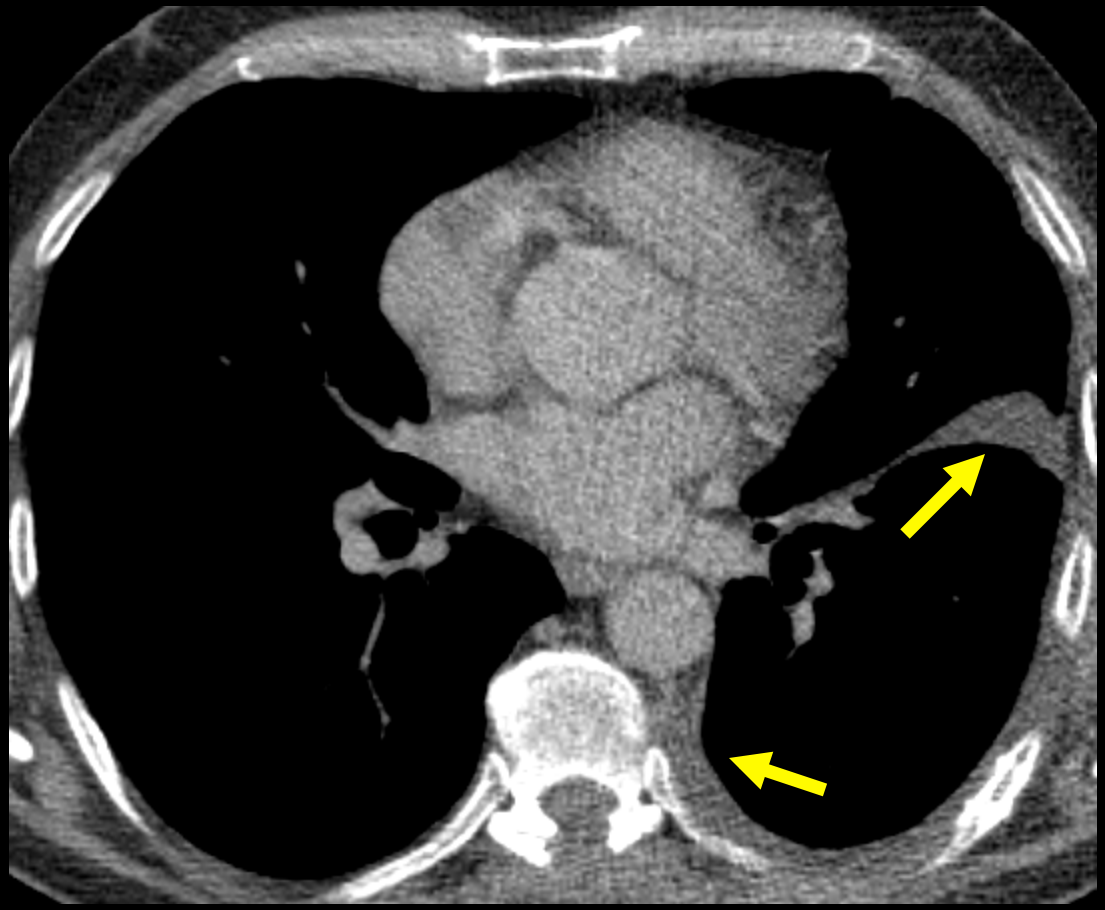


Image A	Image B	Image C
110 mAs	80 mAs	40 mAs
CTDIvol: 7.4 mGy	5 mGy	3.5 mGy

Mediastinal lymph node, aortic calcification in ascending and descending thoracic aorta

Do you see any abnormal findings in this transverse CT image?





Do you see left pleural effusion and left fissural effusion.

Do you see any additional findings on higher dose images

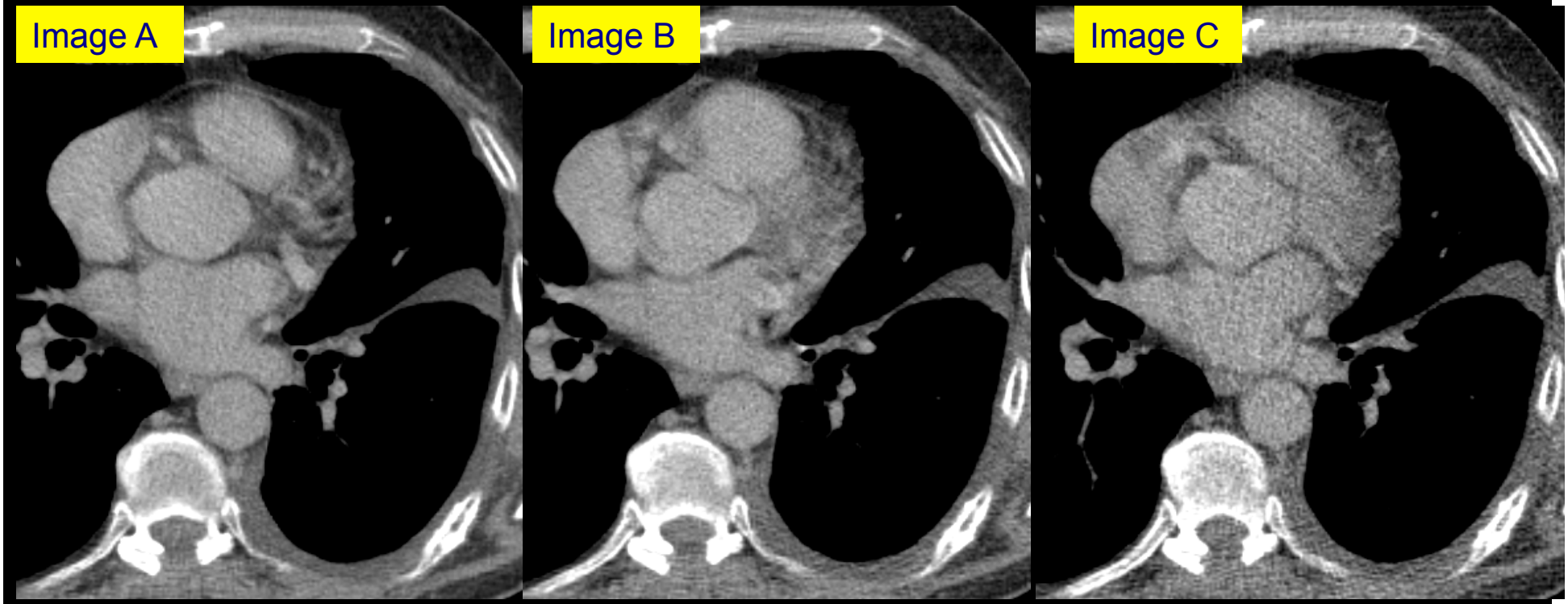
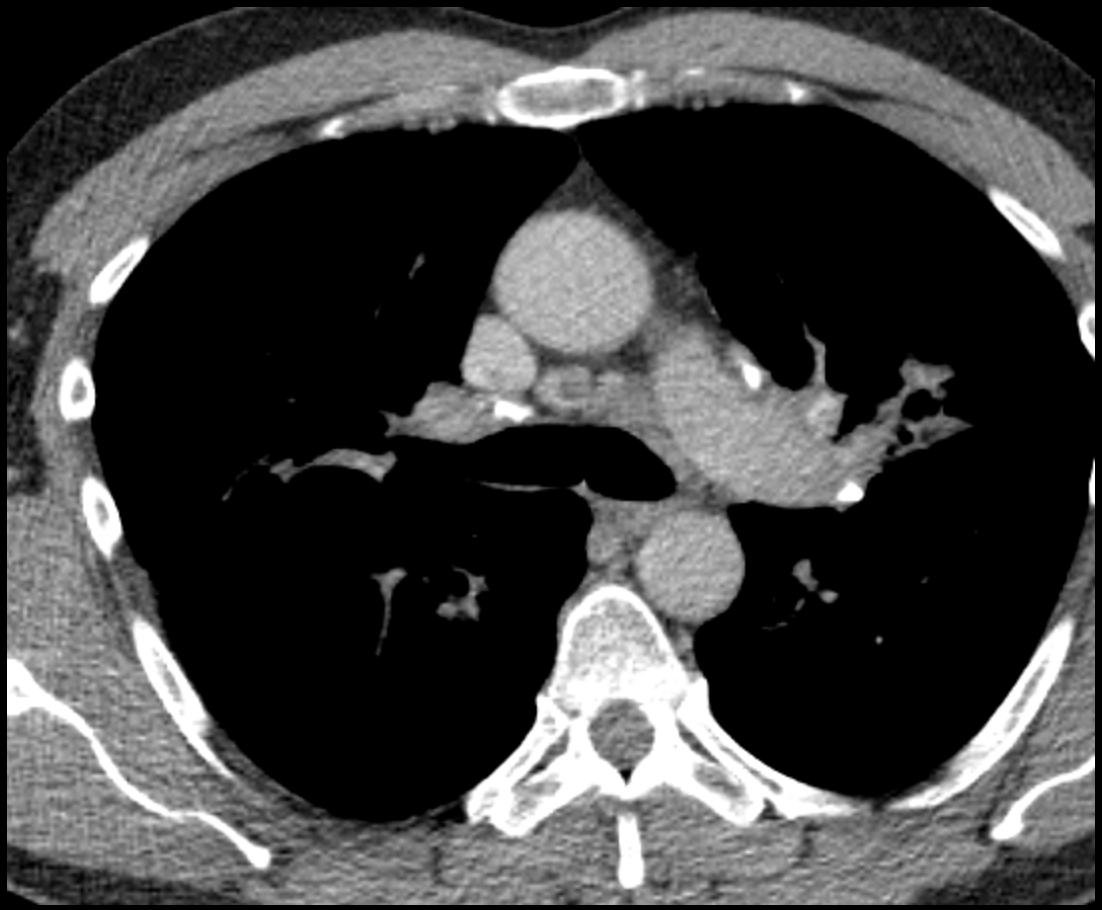
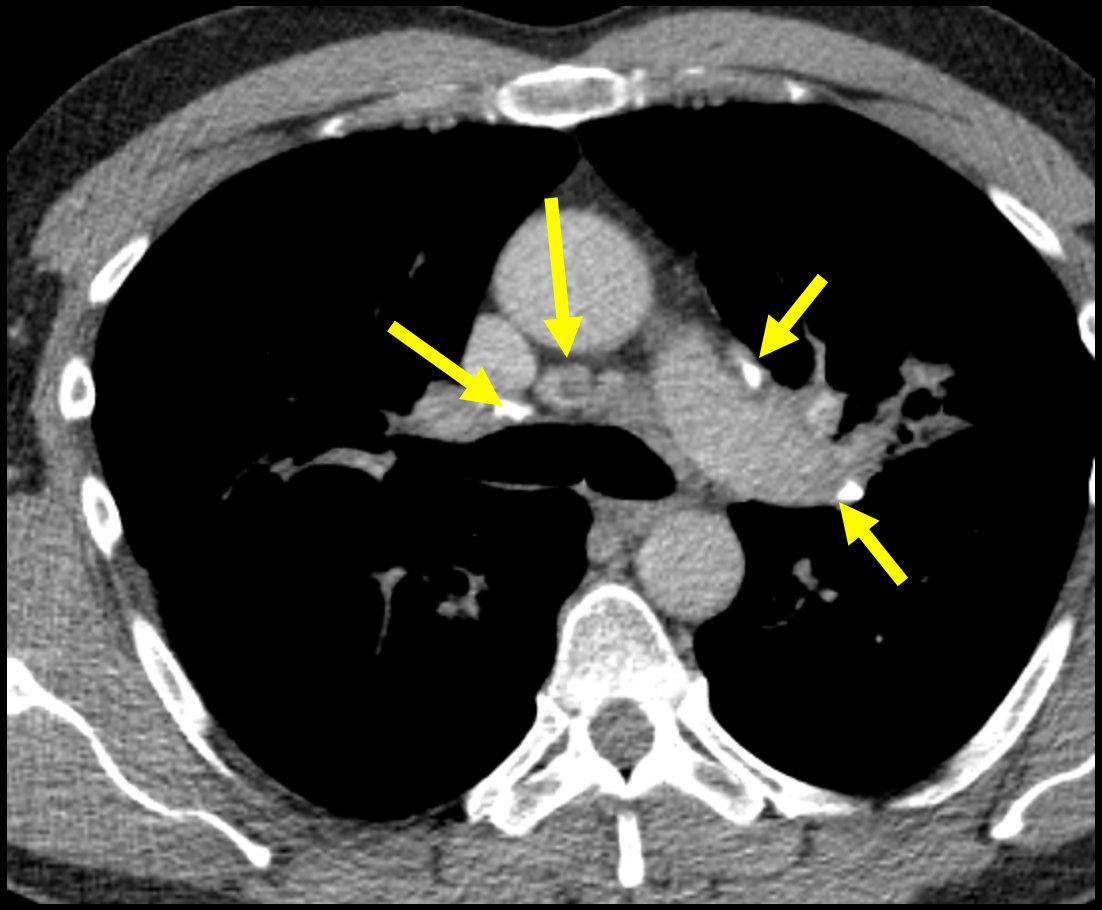


Image A	Image B	Image C
73 mAs	52 mAs	48 mAs
CTDIvol: 4.9 mGy	3.5 mGy	1.6 mGy

Left pleural effusion and left fissural effusion.

Do you see any abnormal findings in this transverse CT image?





Do you see calcified and non-calcified mediastinal lymph nodes?

Do you see any additional findings on higher dose images?

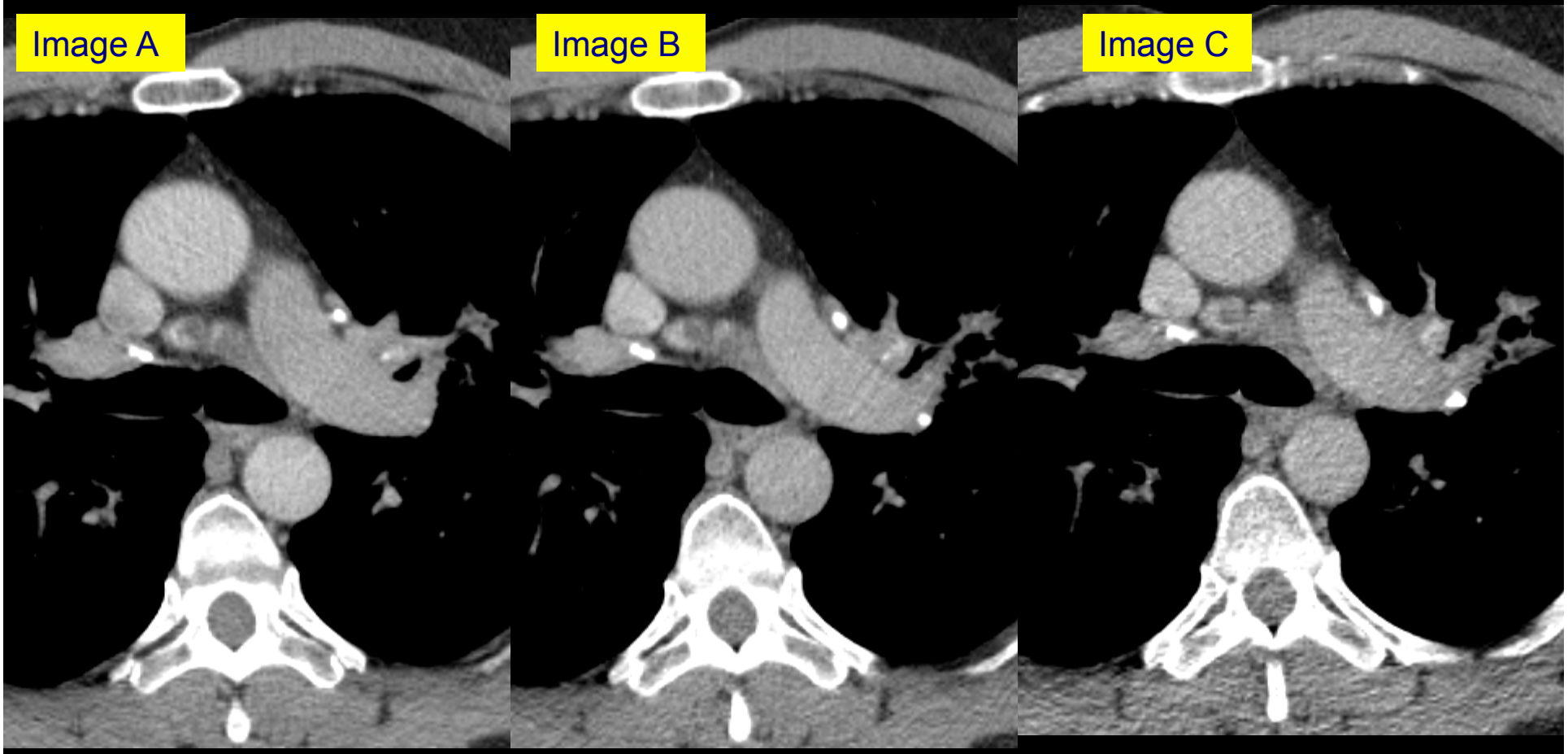
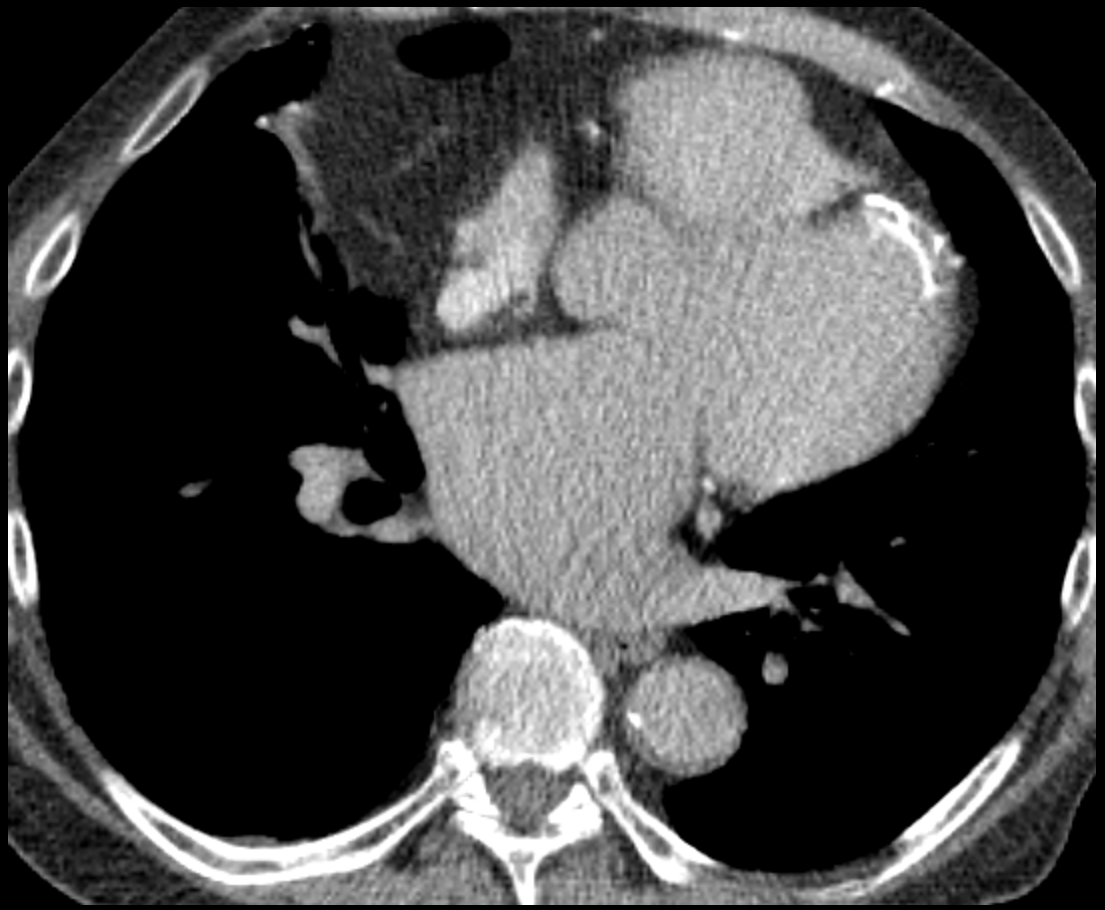
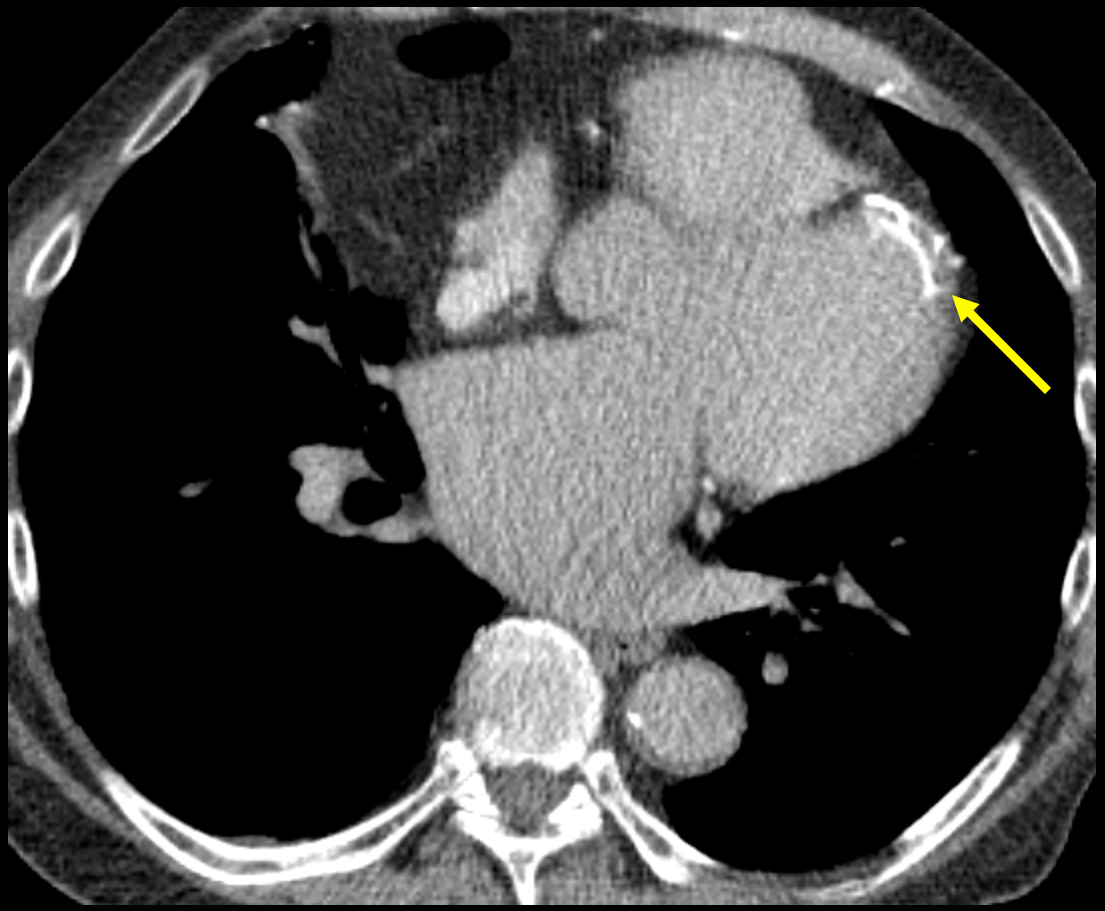


Image A	Image B	Image C
161 mAs	106 mAs	46 mAs
CTDIvol: 10.9 mGy	7.2 mGy	3.1 mGy

Calcified and non-calcified mediastinal lymph nodes

Do you see any abnormal findings in this transverse CT image?





Do you see left ventricular apical calcification suggestive of old myocardial infarction in the LAD territory ?

Do you see any additional findings on higher dose images?

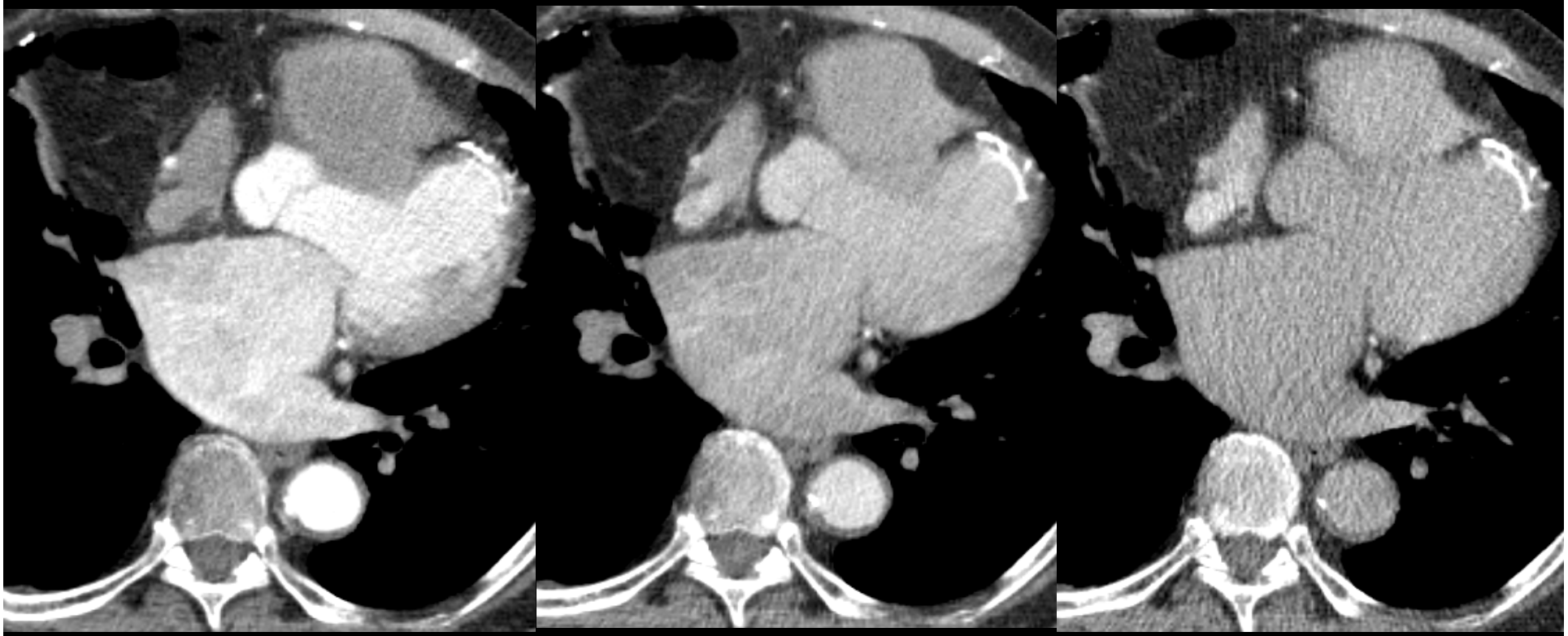
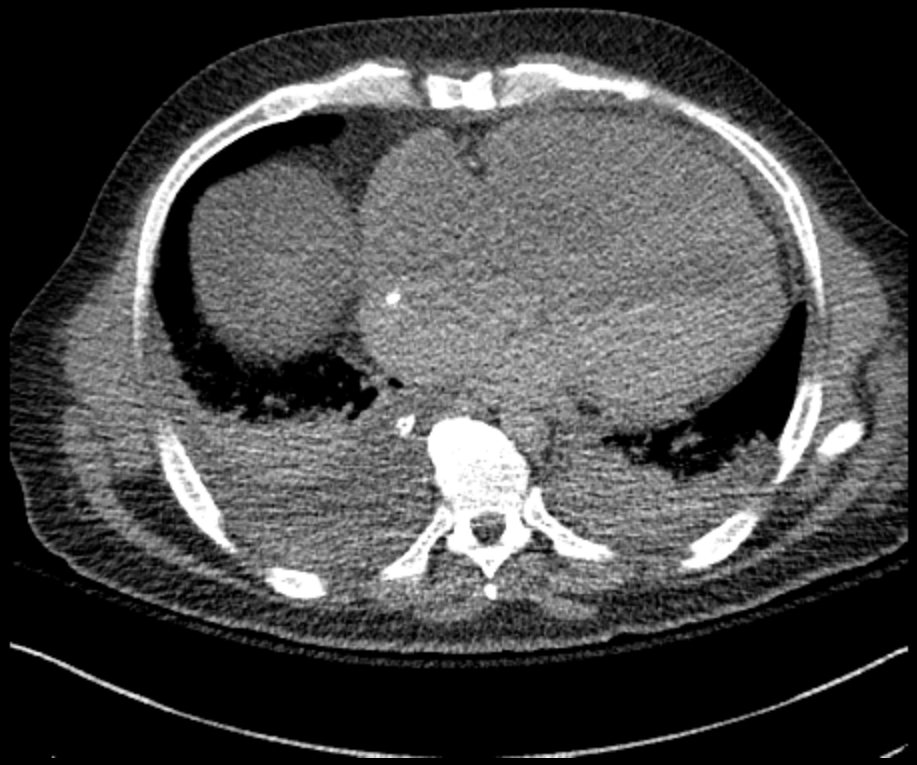
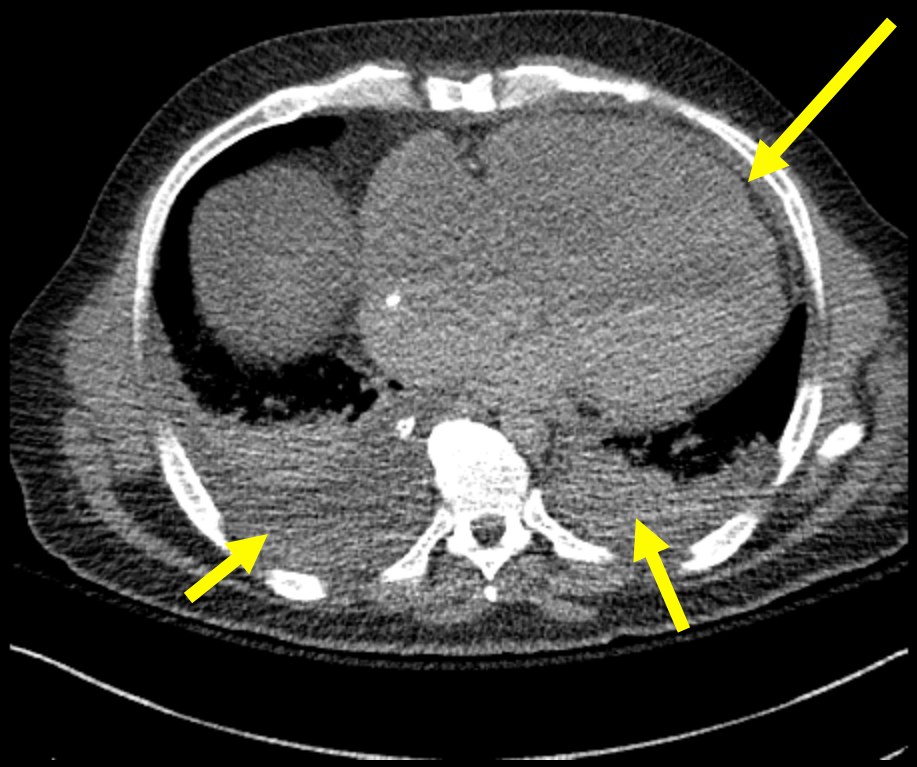


Image A	Image B	Image C
80 mAs	69 mAs	31 mAs
CTDIvol: 5.4 mGy	4.7 mGy	2.1 mGy

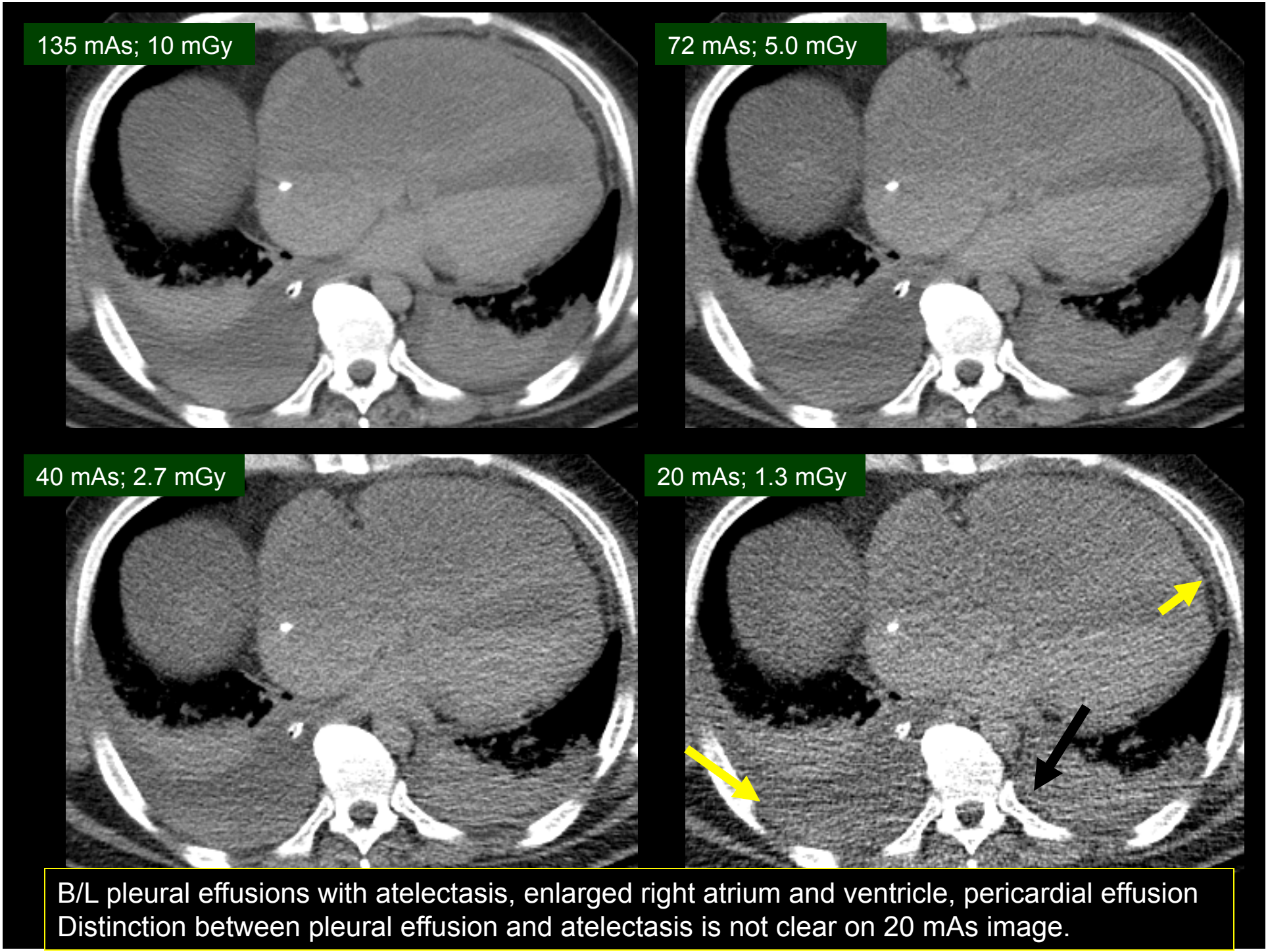
Left ventricular apical calcification suggestive of old myocardial infarction in the LAD territory

Do you see any abnormal findings in this transverse CT image?



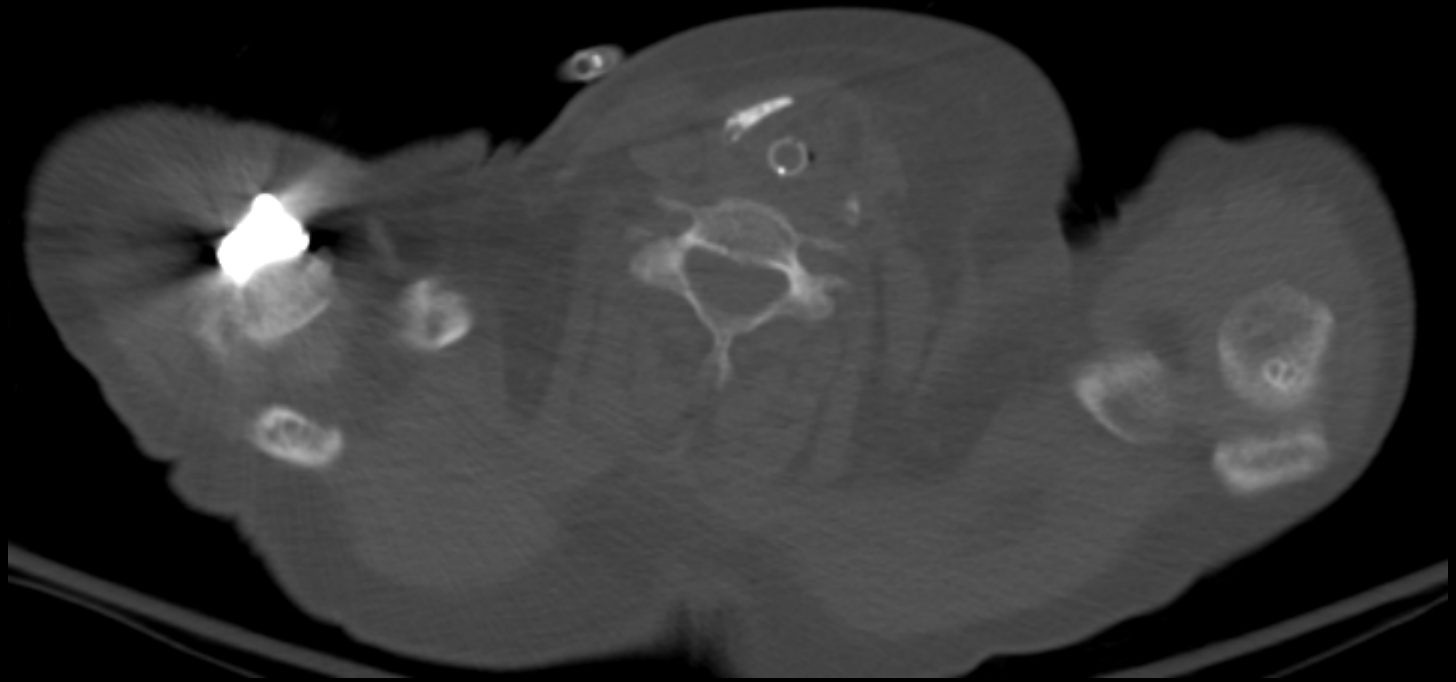


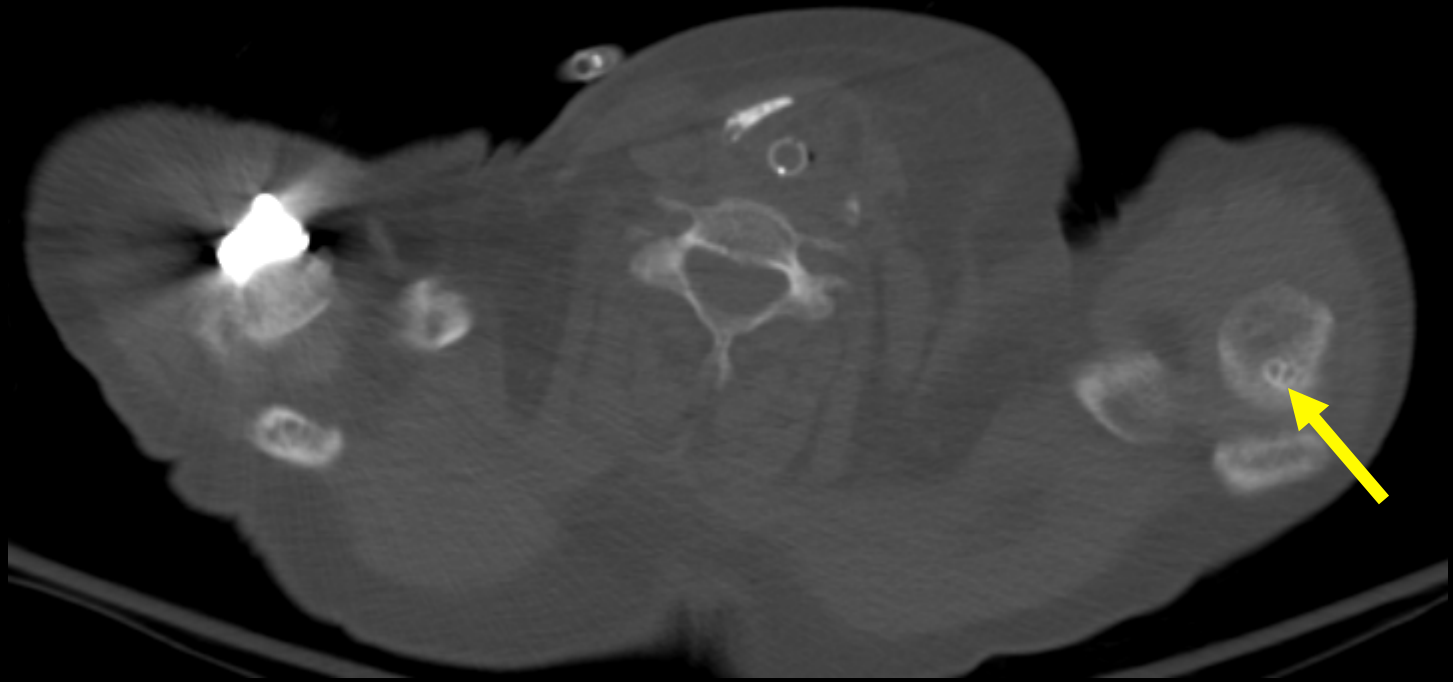
Do you see bilateral pleural effusions with bilateral lower lobe atelectasis, enlarged right atrium and ventricle, and pericardial effusion?



B/L pleural effusions with atelectasis, enlarged right atrium and ventricle, pericardial effusion
Distinction between pleural effusion and atelectasis is not clear on 20 mAs image.

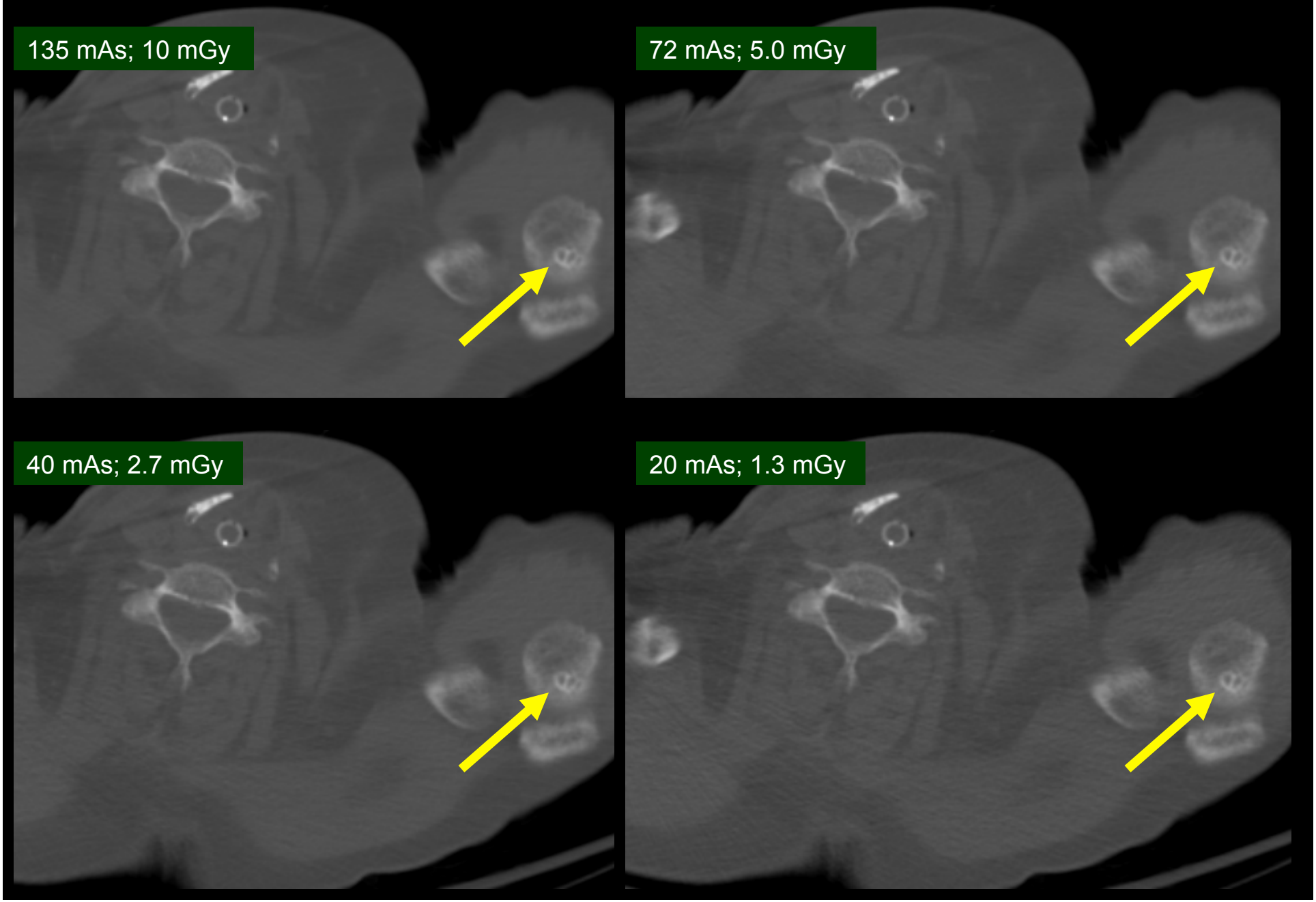
Do you see any findings in this transverse CT image?





Do you see lytic lesion with sclerotic rim in the head of the left humeral head?

Do you see any additional findings on higher dose images?



Thank You

Please contact for any questions

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Mannudeep K Kalra, MD: mkalra@partners.org