

Radiology for GPs – How I report my foreign workers CXR

PLEURAL ANOMALIES & PATHOLOGIES

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About this publication:

Knowledge is to be shared but knowledge is so vast and always evolving. Any work on knowledge will never be complete. So, this is really 'Work in Progress'. I am sharing with you what I have for now but do look forward to my future editions.

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Regards

Dr Rahman

Criteria 3 – Pleura Anomalies & Pathologies

3	Pleural Anomalies and Pathologies	Pleural Caps	All cases are suitable	Suitable
		Pleural Tags	All cases are suitable	Suitable
		Pleural Effusion/ Encysted Effusion/ Loculated Effusion	All cases are unsuitable	Unsuitable
		Fissures	>3mm thickness, irrespective of the length	Unsuitable
		Blunting CPA	Significant only if the adjacent pleural is also thickened	Unsuitable
			All cases are suitable if associated with adjacent ribs fracture (trauma related)	Suitable
		Pleural Calcification	All cases are unsuitable regardless of the causes	Unsuitable
			All cases are suitable if associated with adjacent ribs fracture (trauma related)	Suitable

1. Pleural caps are SUITABLE
2. Pleural tags are SUITABLE
3. Pleural effusion, encysted effusion and loculated effusion are UNSUITABLE
4. Fissures – if >3mm thick, irrespective of length, are UNSUITABLE
5. Blunting CPA
 - a. UNSUITABLE if the adjacent pleura is thickened
 - b. SUITABLE if it is due to trauma. There must be associated adjacent rib fracture
6. Pleural calcification
 - a. All cases are UNSUITABLE regardless of cause
 - b. SUITABLE if it is due to trauma. There must be associated adjacent rib fracture

Glossary:

CPA has 2 meanings

1. Costo-phrenic angle – angle between diaphragm and chest wall
2. Cardio-phrenic angle – angle between diaphragm and heart border

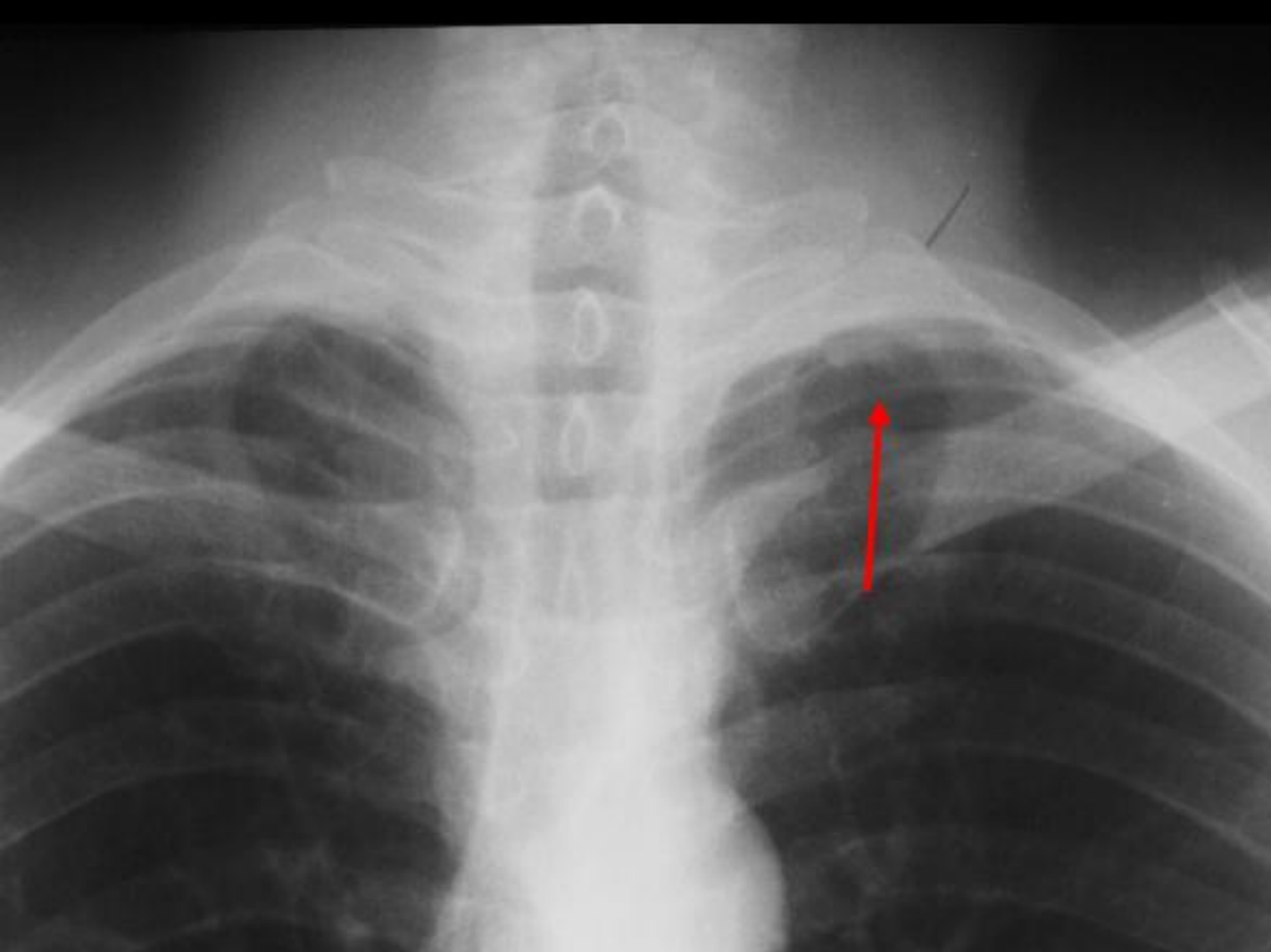


Fig 3.1: Irregular thickening at superior chest wall. This is pleural cap - SUIABLE.

What is pleural cap?

Pleural caps or some call it apical caps, are thickening at the lung apices. They are chronic and are due to pleural fibrosis or scarring. Frequently increases with age. Often bilateral but can be unilateral. If bilateral, most often are not symmetrical. If unilateral, most often on the right side. The cause is usually idiopathic. Can be secondary to previous apical infection such as tuberculosis or secondary to radiation. Pleural cap has no clinical significance.

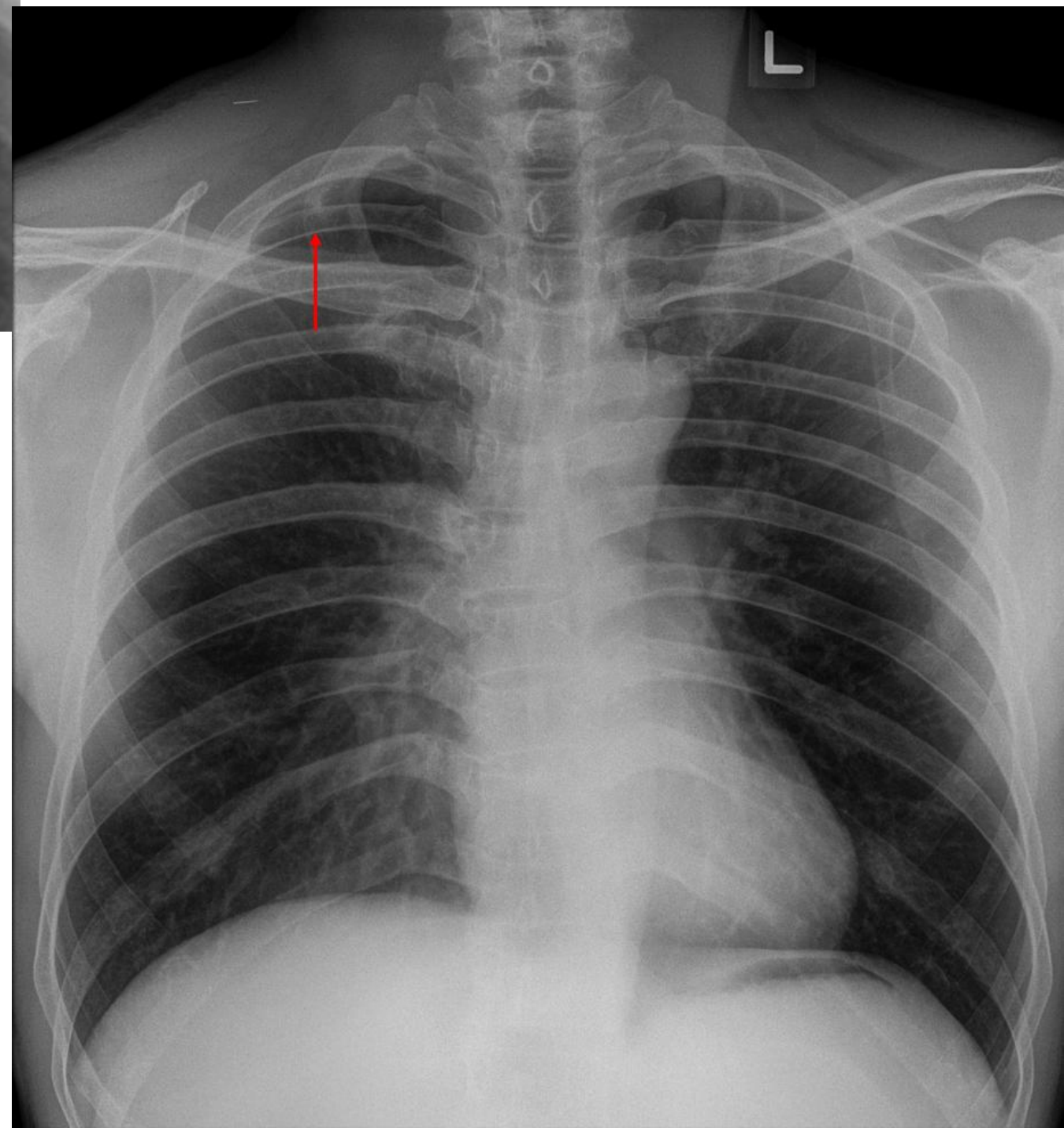


Fig 3.2: Triangular shadow at superior chest wall. This is pleural tag - SUIABLE

Note a dense linear opacity in the right supraclavicular region. This is a susuk and susuk is SUIABLE.

What is pleural tag?

Pleural tags are triangular and slender bridges of soft tissue, often seen at the apices. They are due to interlobular septal thickening and fibrosis. These fibrosis are usually desmoplastic reaction to local inflammation.

Usually unilateral and usually on the right side. No clinical significance.

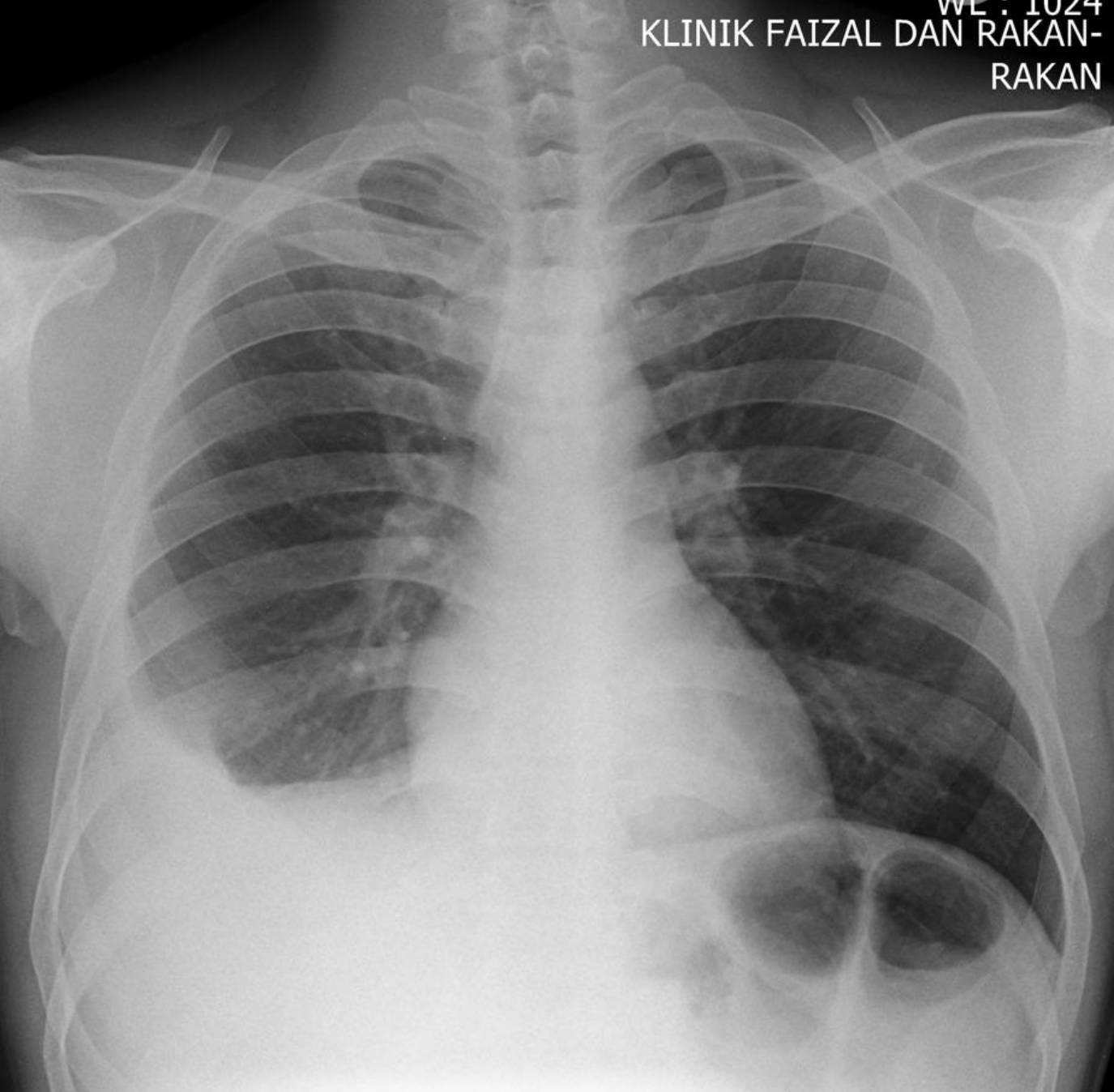


Fig 3.3: Blunting of right CPA with meniscus sign. This is right sided pleural effusion and is UNSUITABLE

What are the differences between pleural effusion, encysted effusion and loculated effusion?

Pleural effusion is abnormal accumulations of fluid within the pleural layers (visceral and parietal).

Encysted pleural fluid refers to collection of pleural fluid within the lung fissures.

Loculated pleural effusion is localised collection of fluid within the fissures or between the pleural layers.

All types of effusion above are UNSUITABLE.

In the context of Fomema, the effusion is most likely an exudate or pus.

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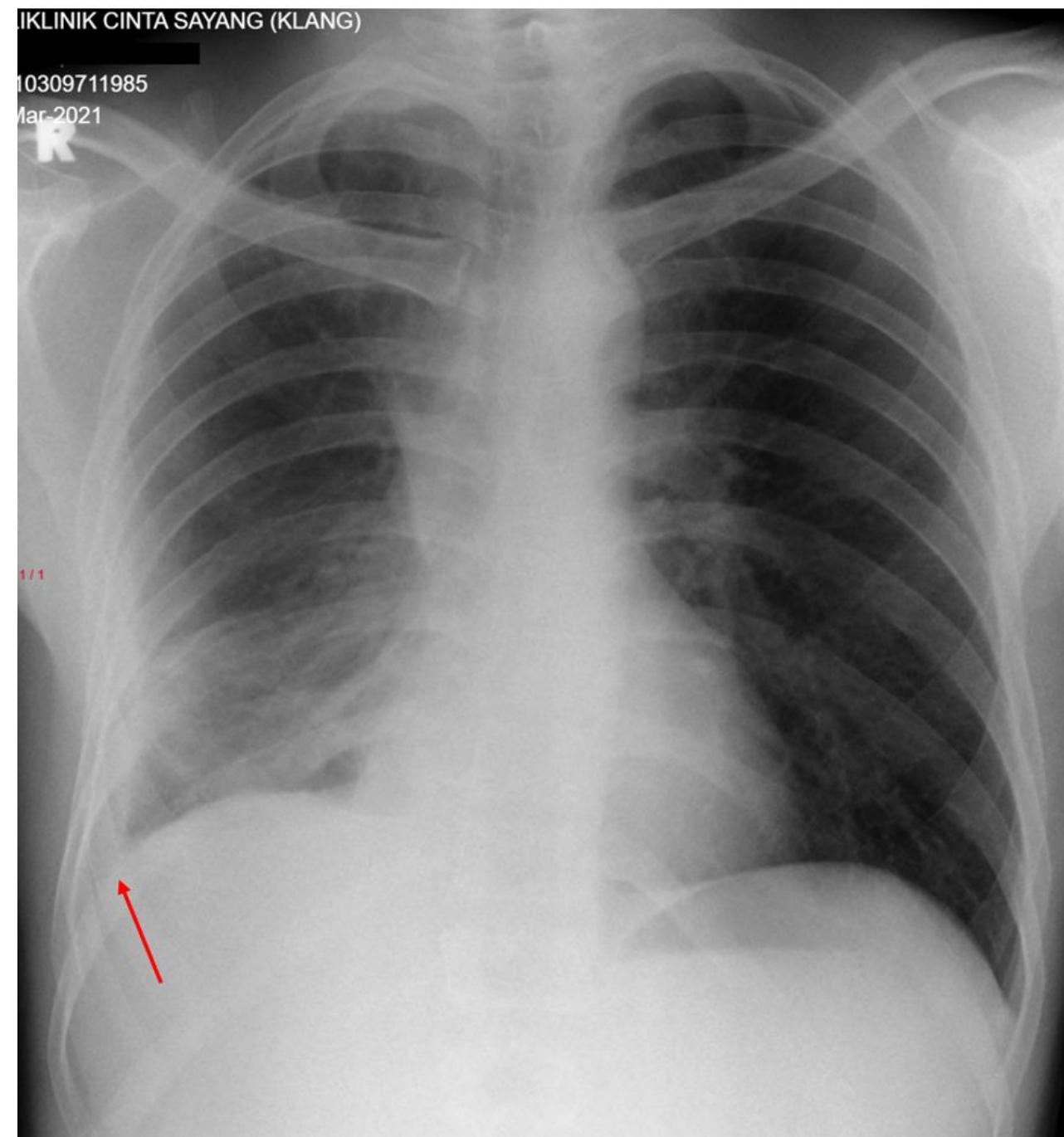


Fig 3.4: Compare right & left CPA. The left CPA is acute and sharp - normal. The right CPA is blunted and the adjacent wall is thickened - UNSUITABLE.

What does blunting CPA means?

Similar to thickened fissure, blunting CPA is usually related to presence of pleural effusion. But it can also be due to fibrosis or simply over-inspiration.

In the context of foreign workers examination, without an acute symptoms, most of the time, blunting CPA is due to pleural fibrosis.

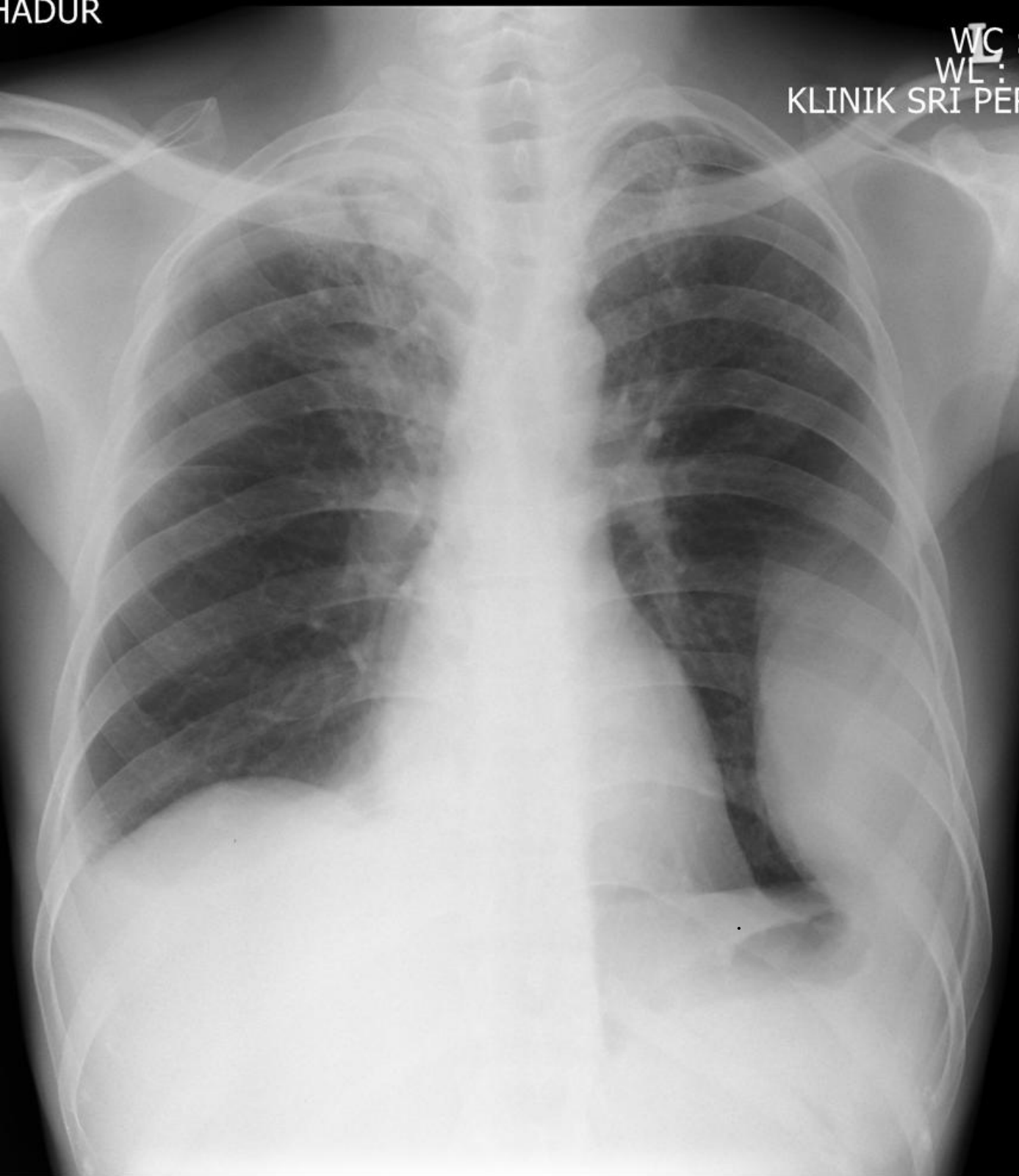


Fig 3.5: Blunting of left CPA with pleural-based lesion, so called pregnant lady sign. This is loculated effusion and is UNSUITABLE. Note also he has right apical fibrosis – double reasons for being unsuitable.



Fig 3.6: Pregnant lady sign – this indicates that the lesion is extra-pulmonary ie outside the lung. In this case, it is in the pleural space

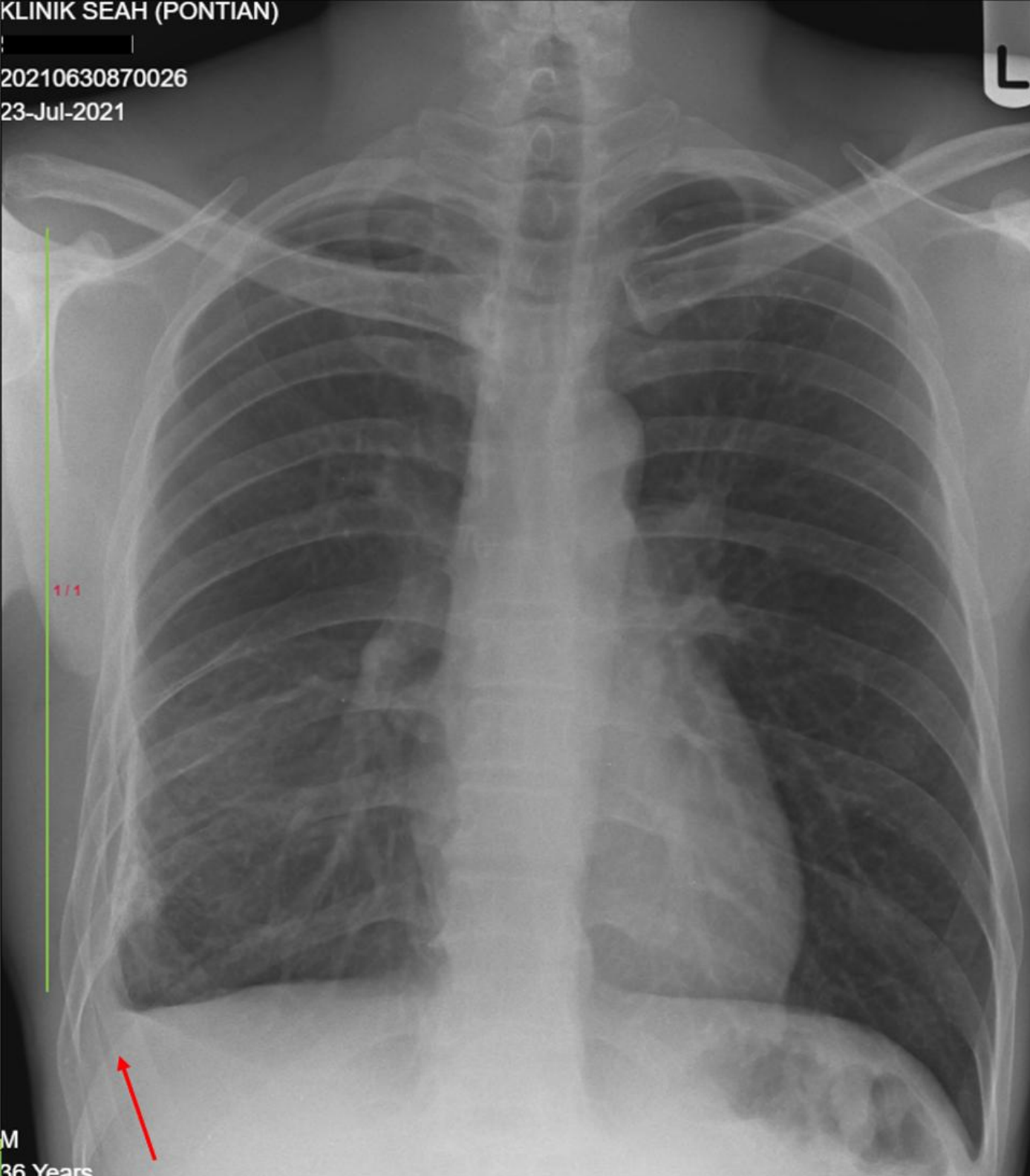
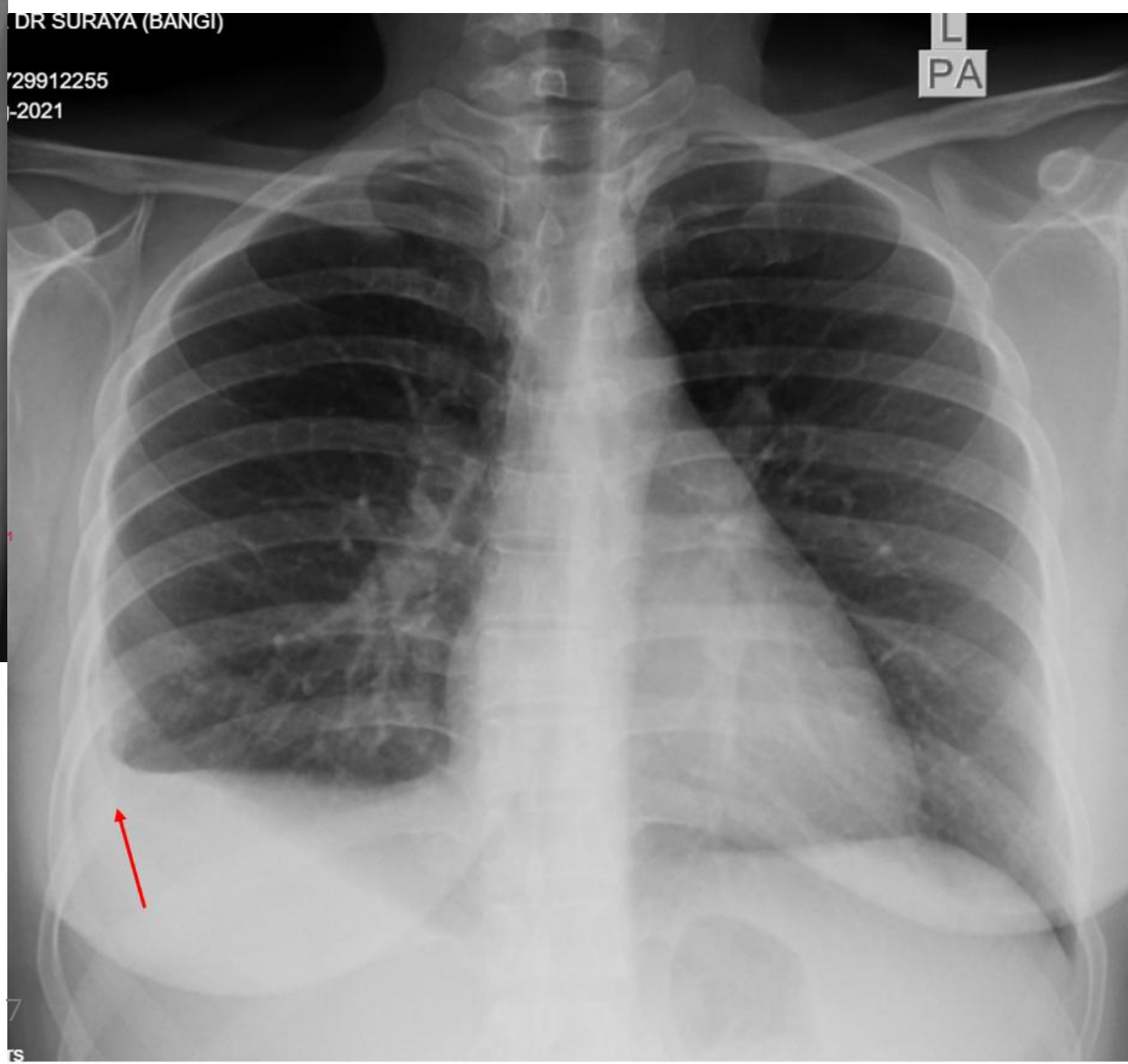
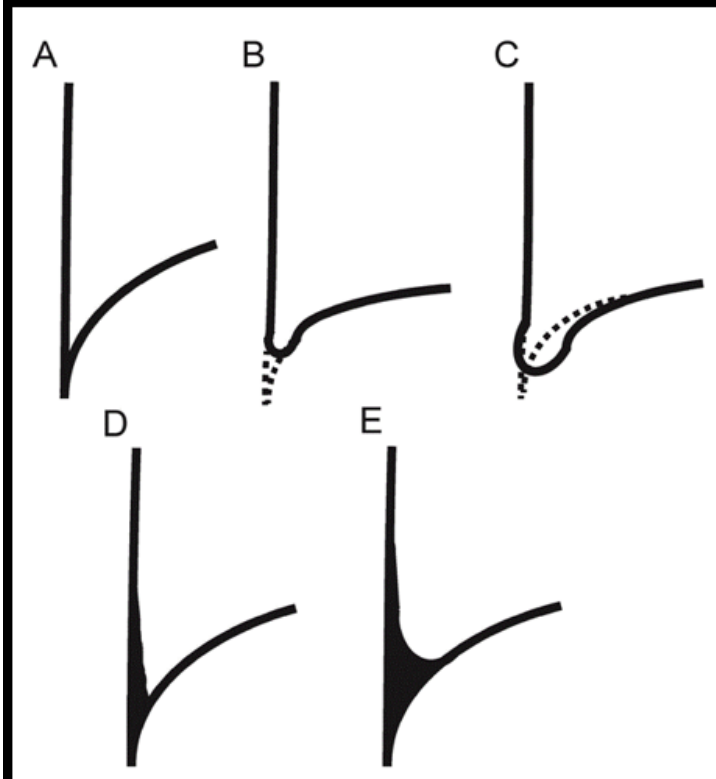


Fig 3.7: Again compare right & left CPA. The right CPA is blunted and the adjacent wall is thickened - UNSUITABLE.

Fig 3.8: Blunting right CPA with thickening along adjacent wall - UNSUITABLE.



Blunting of CPA (Costo-phrenic angle)



SUITABLE

Causes

1. Over-inspiration
2. Normal variant

UNSUITABLE

Blunting associated with thickening of lateral chest wall

Causes

1. Pleural fibrosis
2. Pleural effusion

Fig 3.9: How to differentiate between SUITABLE and UNSUITABLE blunting CPA?

When the CPA is blunted, look for presence of adjacent wall thickening. If the wall is thickened, it is UNSUITABLE. If there is no wall thickening, the blunting is just due to over-inspiration.

A is normal CPA with acutely sharp angle. In B & C, the angles are blunted but there is no wall thickening. These are due to over-inspiration or just normal variant and are SUITABLE. In D & E, the angles are blunted and the adjacent walls are thickened. These can be due to pleural fibrosis or pleural effusion and are UNSUITABLE. In the context of Fomema screening, these are mostly pleural fibrosis.

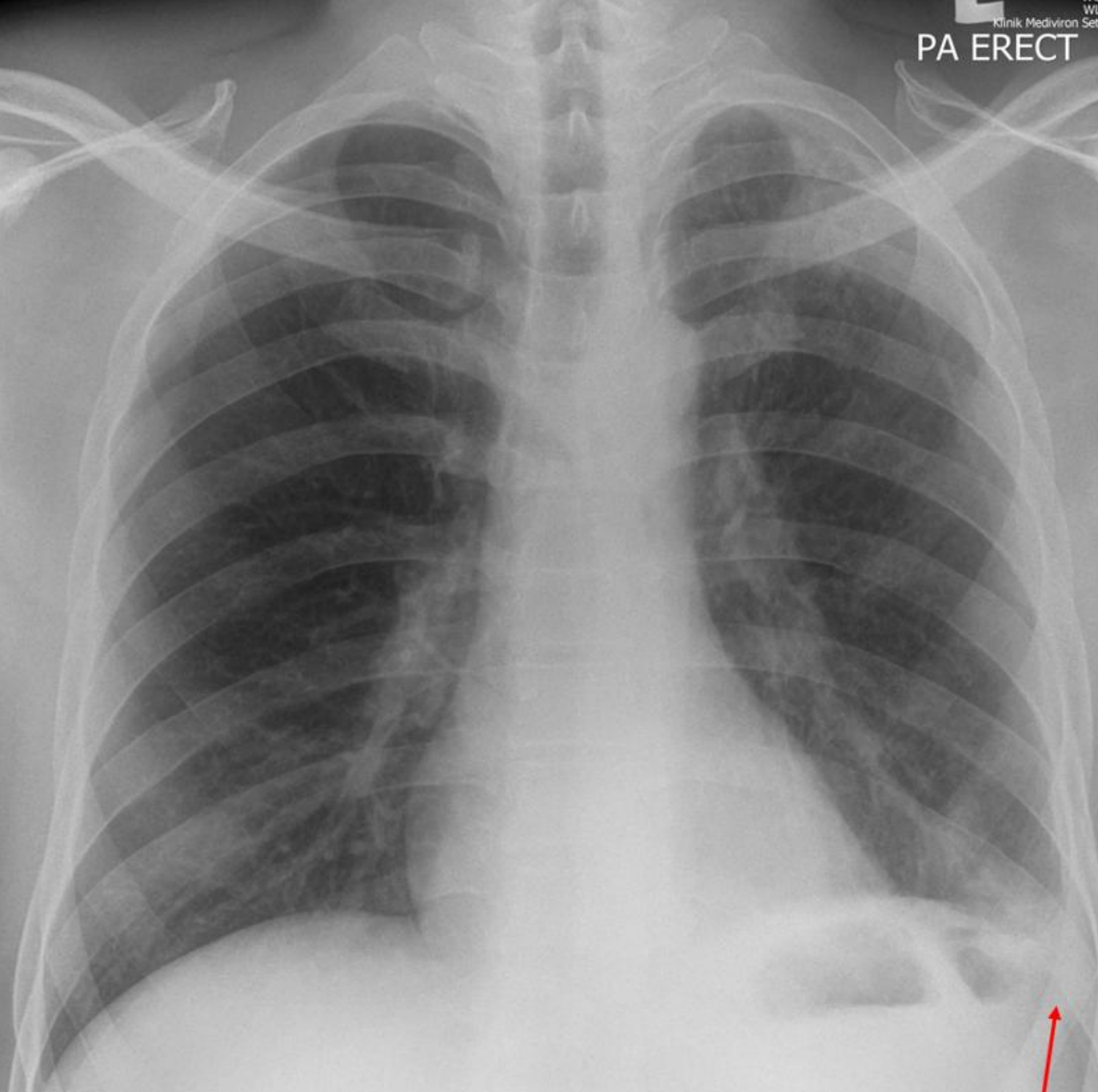


Fig 3.10: Blunting left CPA with thickening along adjacent wall - UNSUITABLE.

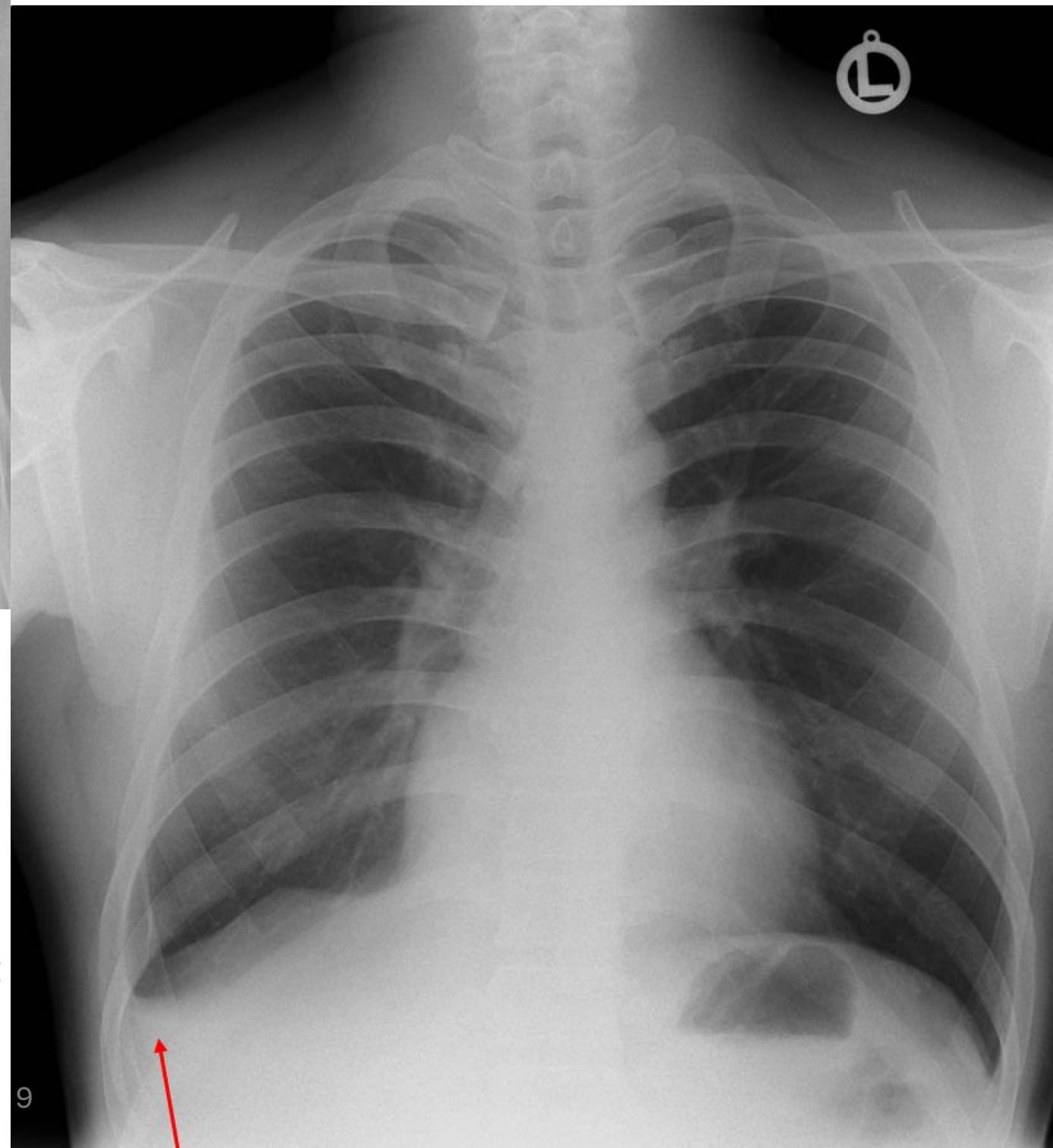


Fig 3.11: The right CPA is blunted but there is no thickening along lateral chest wall. This is due to over-inspiration - SUITABLE.

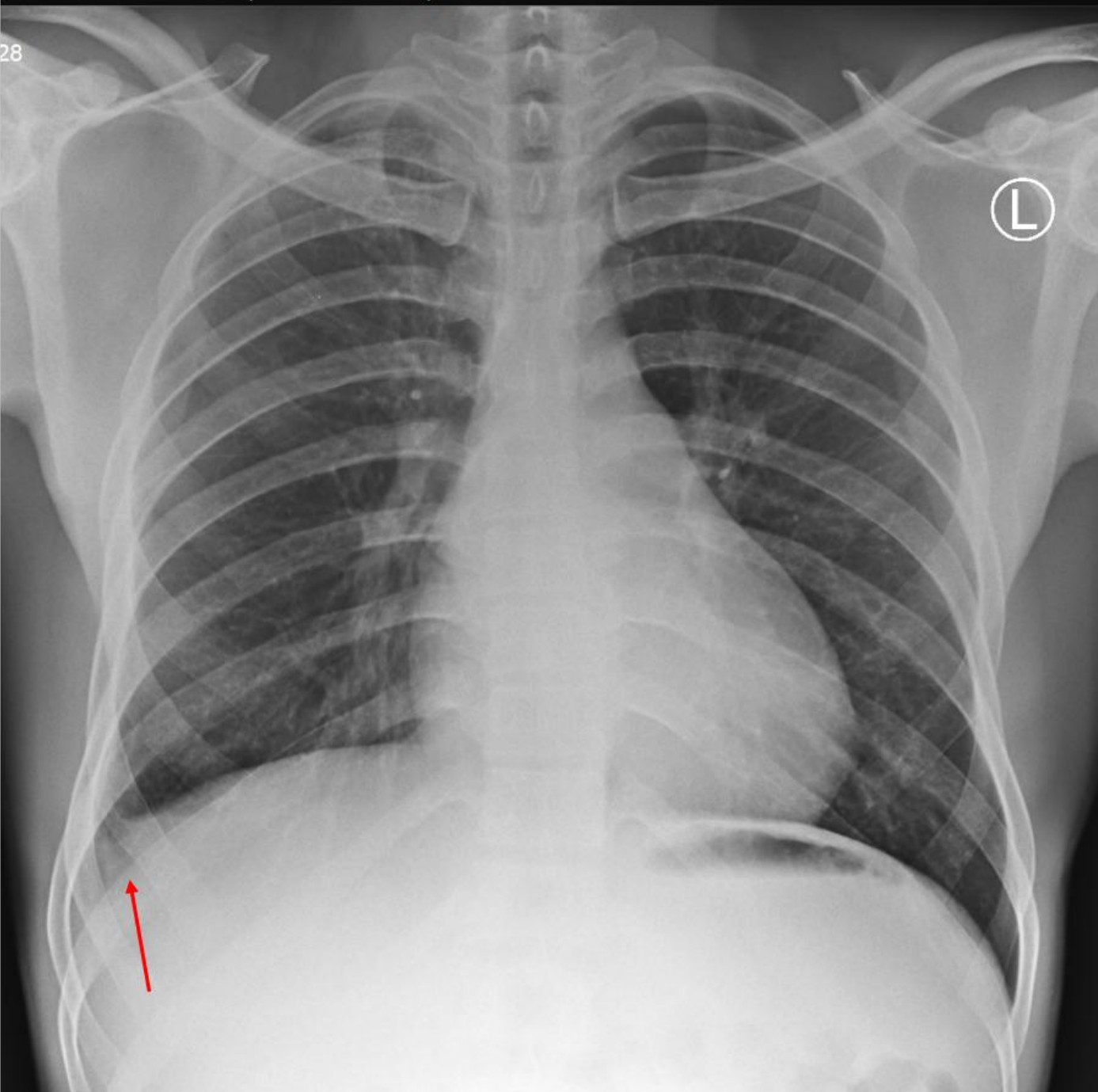
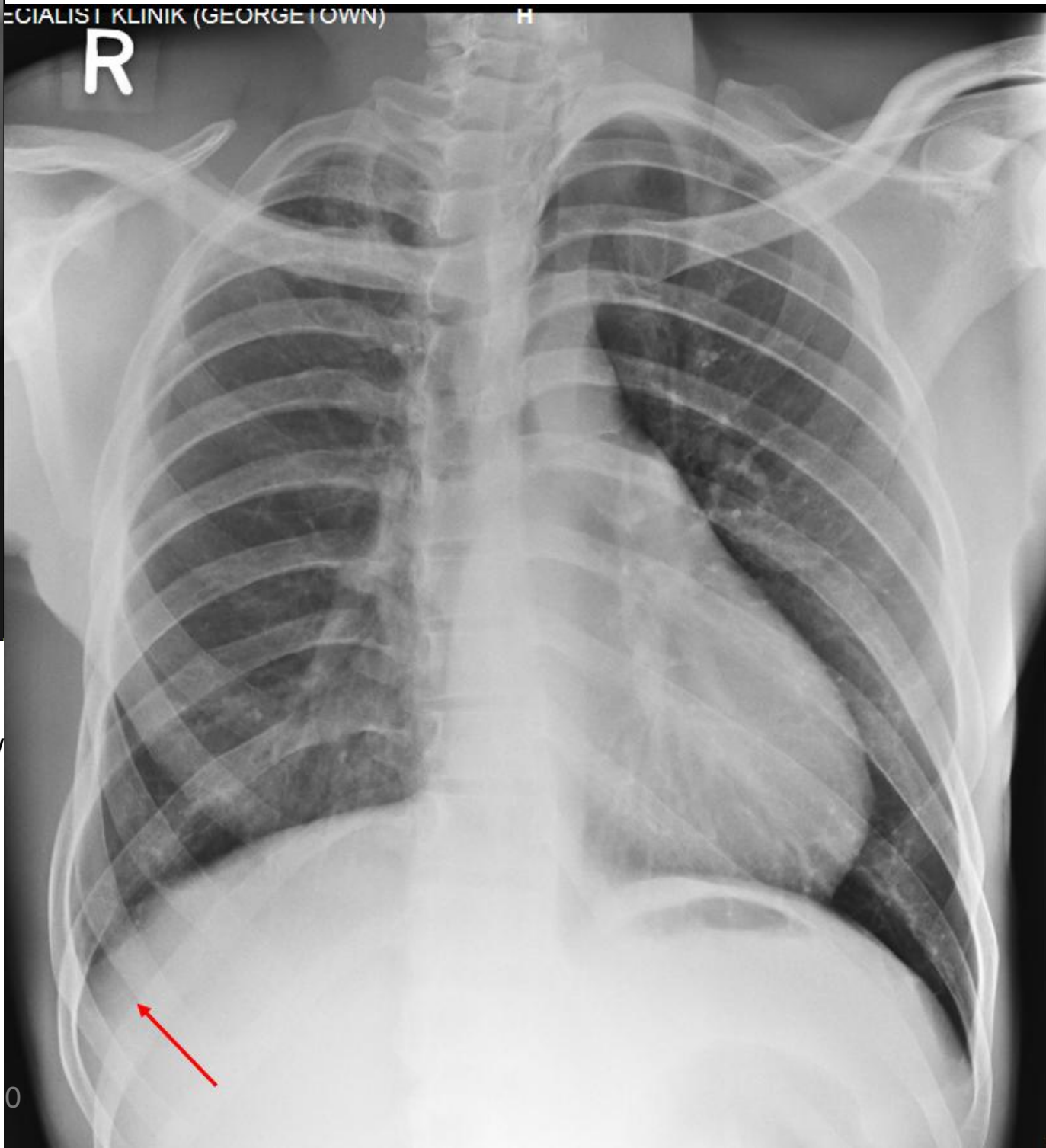


Fig 3.12: Look at the right CPA, blunting or no blunting? Rather ambiguous isn't it? You may proceed to do RPO view.



When you are not sure blunted or not blunted, what should you do?

If PA view is ambiguous, there are a few tricks you can do:

- Proceed to do oblique view. If it is on the right side, do RPO view and vice versa for the left side.
- Adjust window width and window level to see the CPA better.
- Repeat CXR in expiration instead of inspiration

Fig 3.13: RPO view of the same patient shows a sharp right CPA – no blunting - SUITABLE.

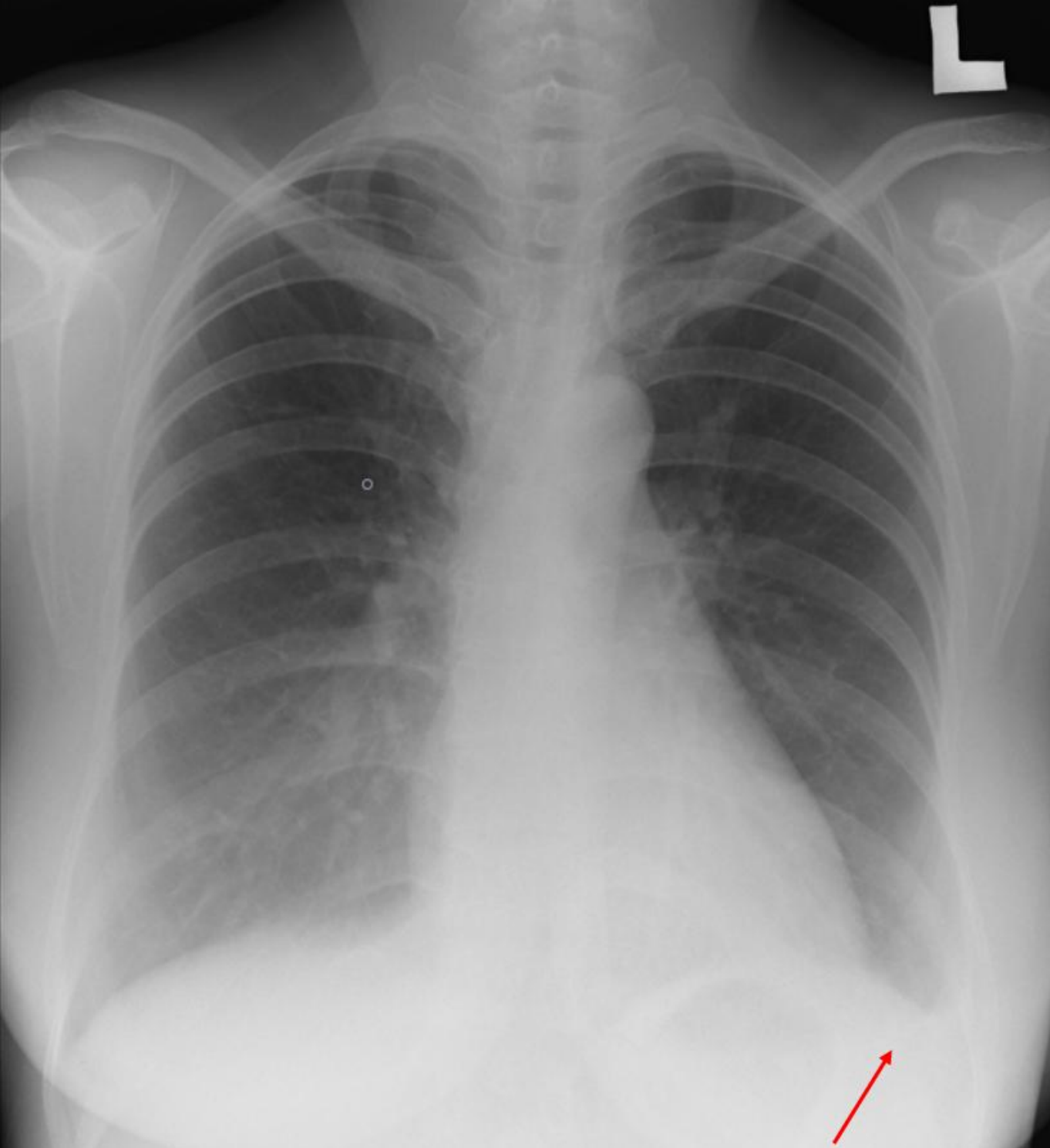


Fig 3.14: Is the left CPA blunted? Or is it just overlying breast shadow?
What can you do?

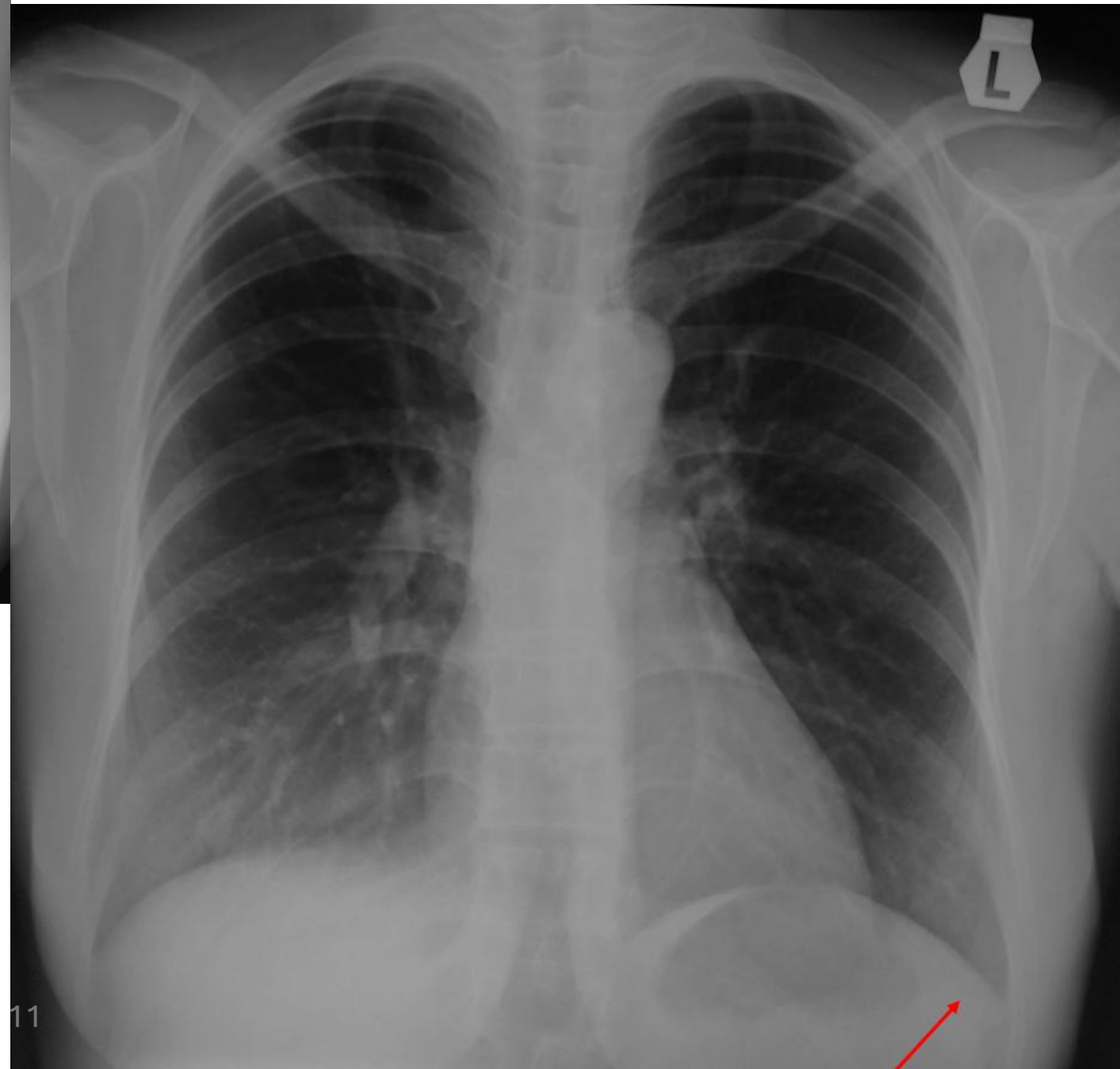


Fig 3.15: Simple! Just go back to your computer screen and
adjust the WW & WL i.e brightness and contrast. Now you can
see a very sharp left CPA - SUITABLE.

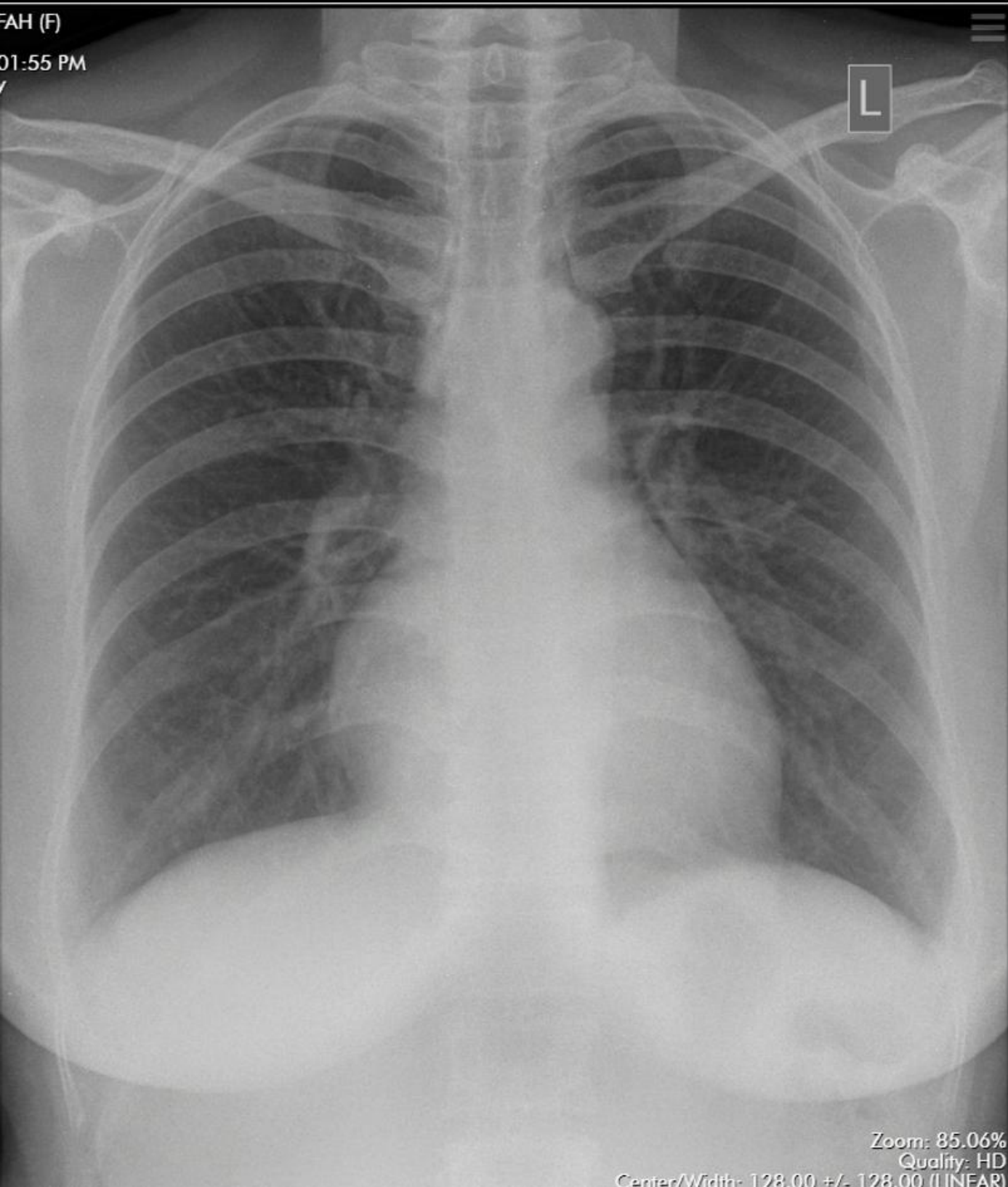


Fig 3.16: Another ambiguous left CPA – is that blunting or breast shadow?

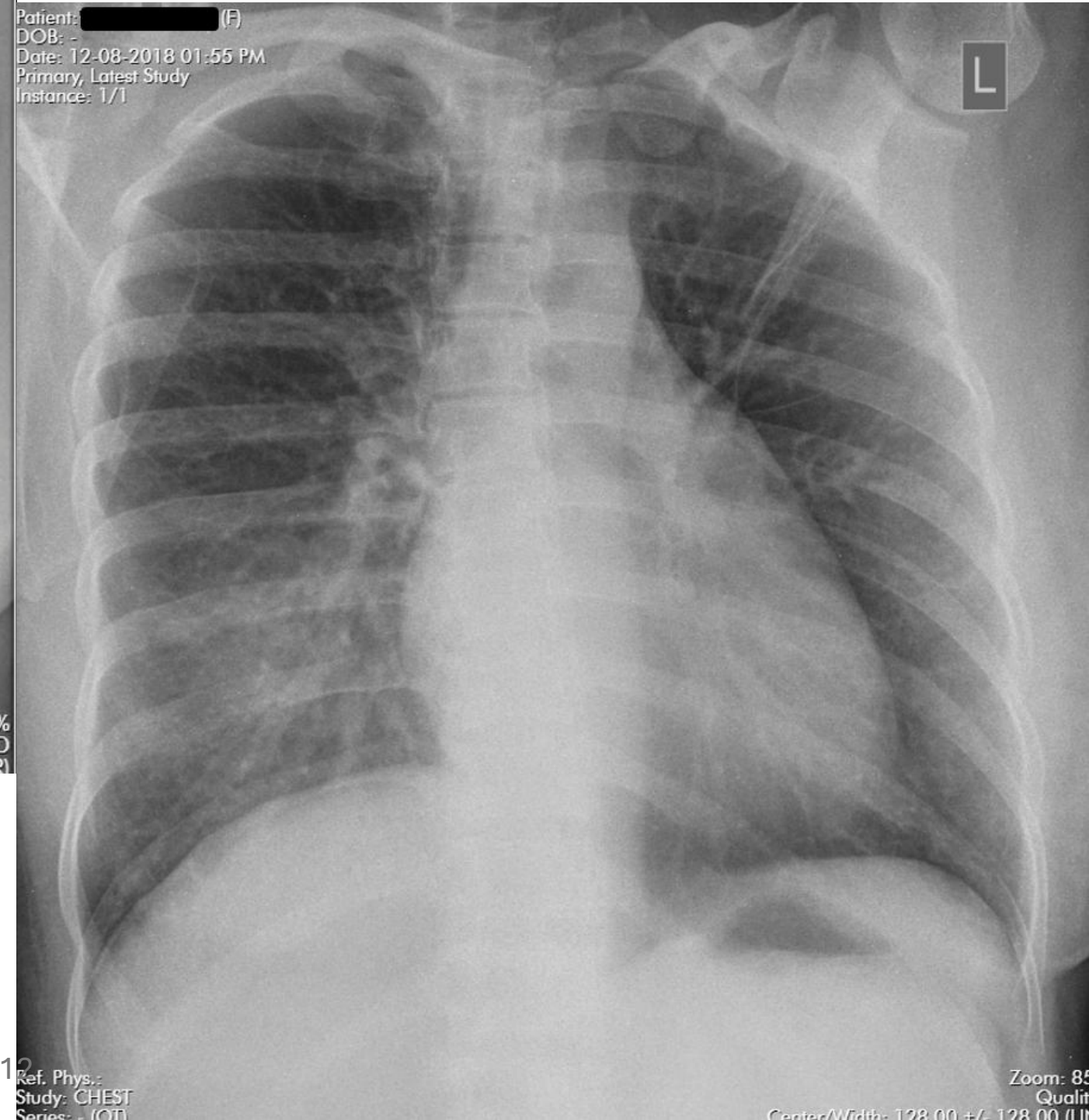


Fig 3.17: LPO view of the same patient – now you can see a perfectly sharp left CPA - SUITABLE.

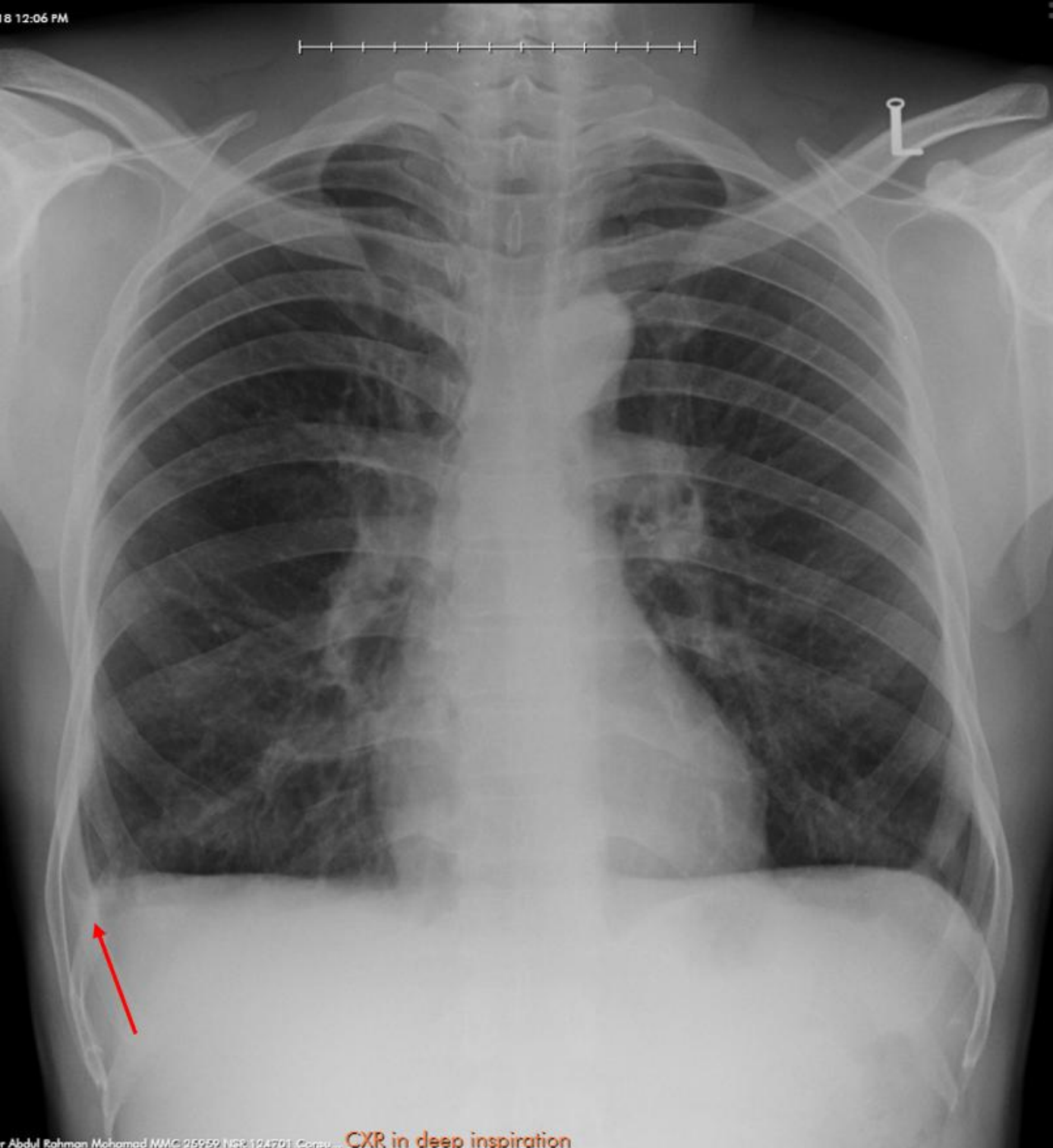


Fig 3.18: The right CPA is ambiguous.

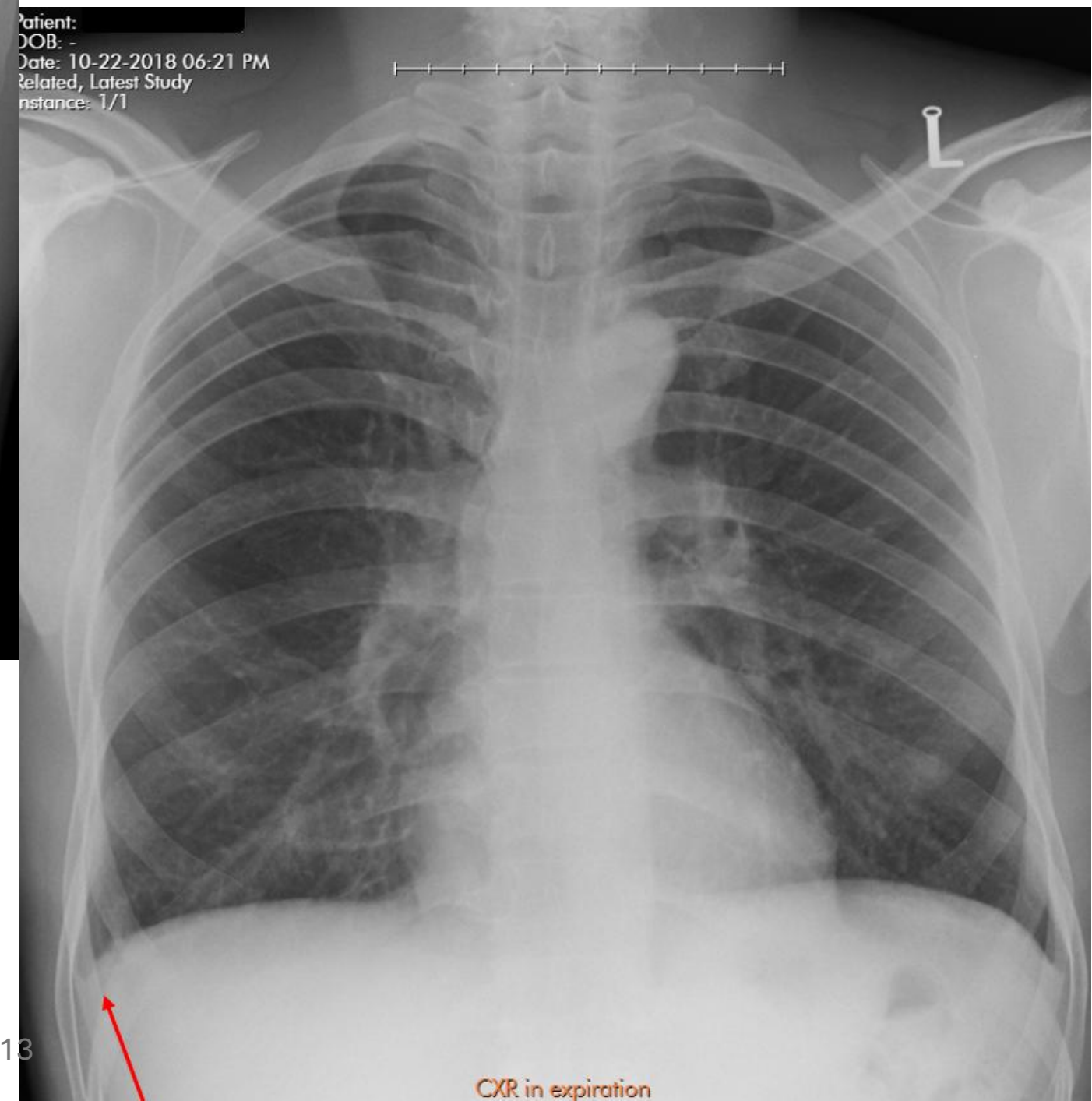


Fig 3.19: Repeat PA view in expiration of the same patient shows a sharp right CPA - SUITABLE.

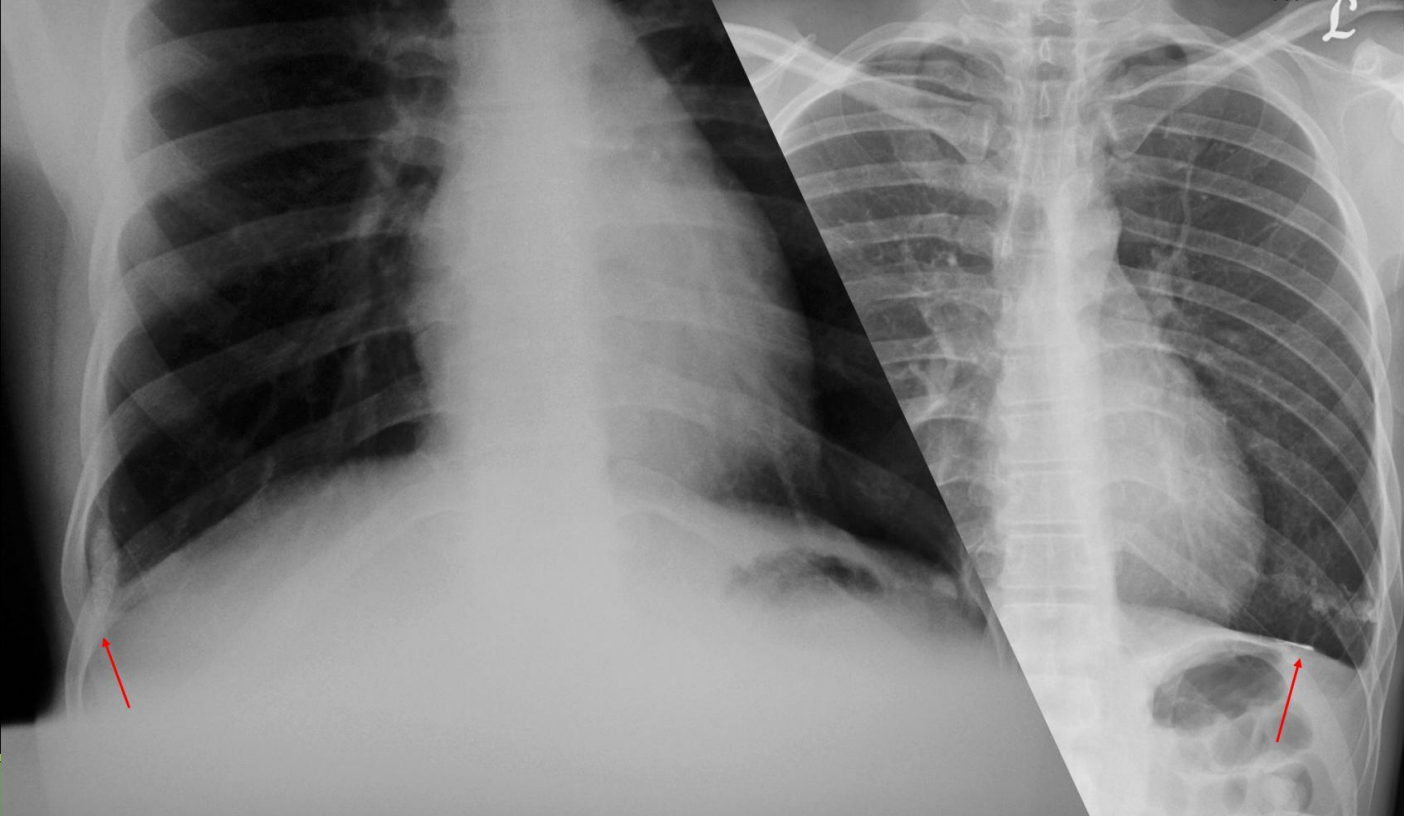


Fig 3.20: Combo image of 2 different persons showing pleural calcification. The image on the left shows a thick and coarse opacity at right CPA. The image on the right shows a thin linear density at left hemi-diaphragm. Both cases are UNSUITABLE.

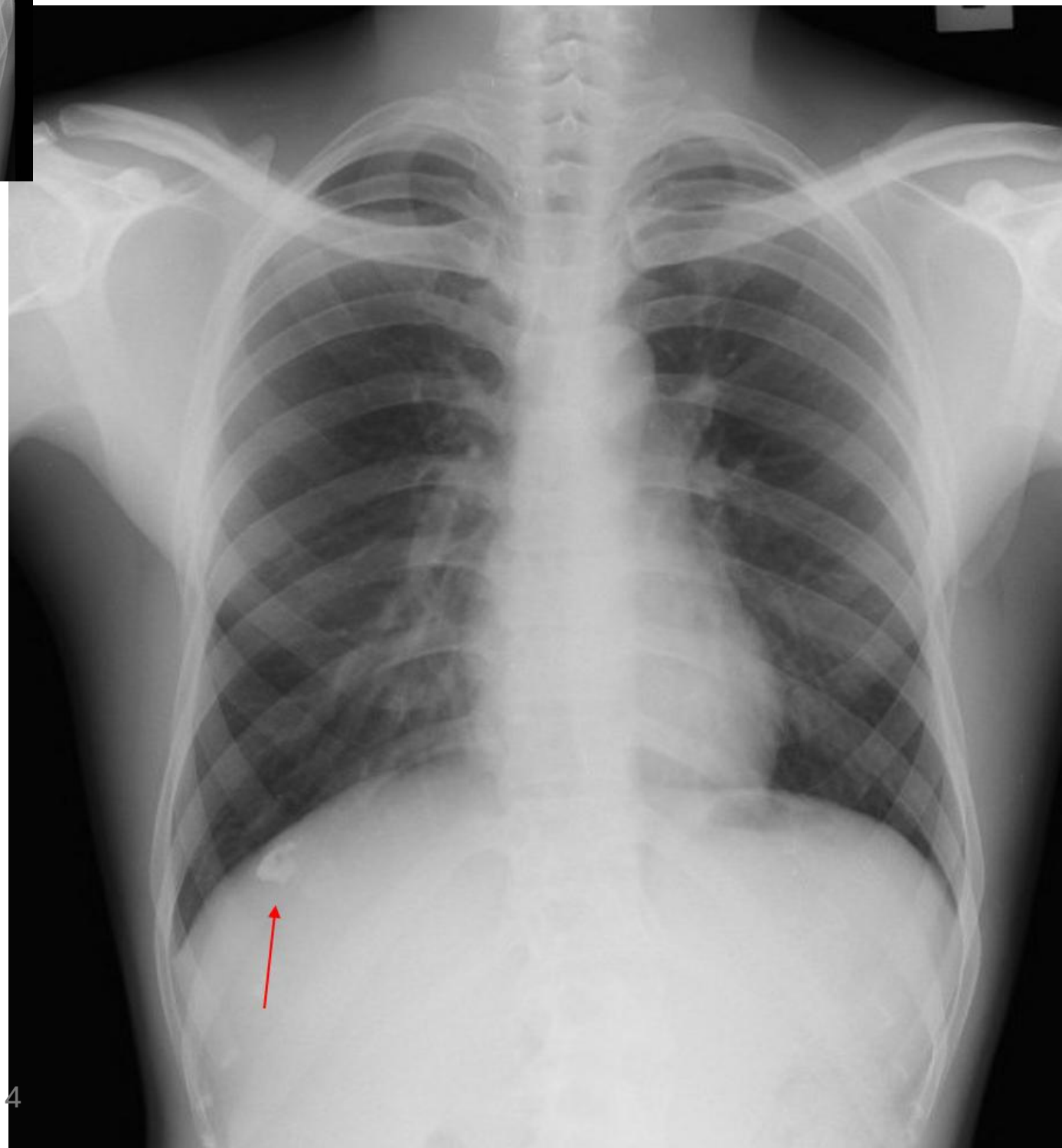
Why is pleural calcification UNSUITABLE?

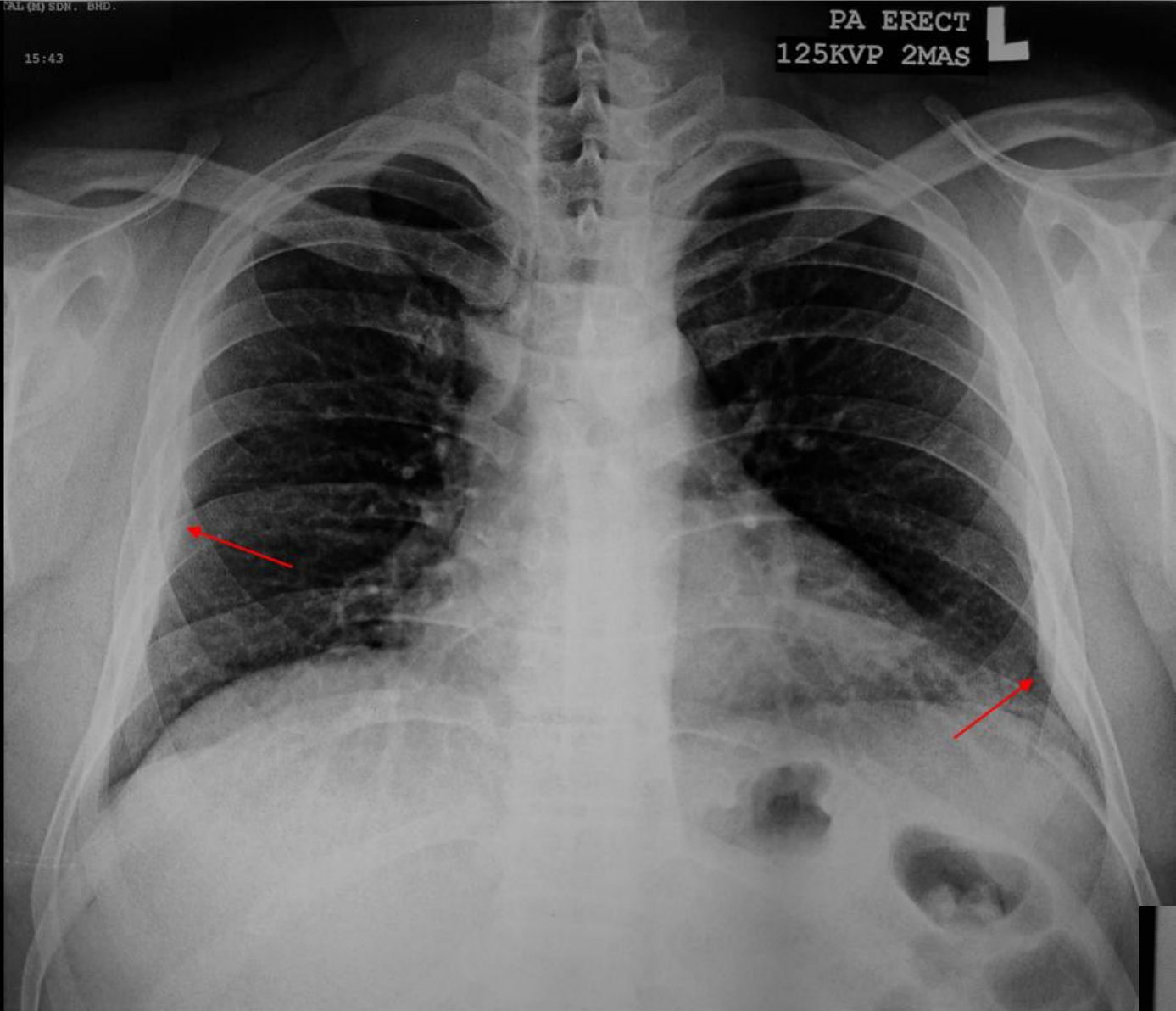
Pleural calcification can be due to many causes including tuberculosis and asbestosis. The causes are usually serious and therefore, it make sense that the worker is UNSUITABLE for employment in Malaysia.

How do I recognise pleural calcification?

Pleura is a thin covering over the lung. Therefore, when calcified, it appears like a dense linear shadow or an irregularly shaped dense mass of bone density. It can be anywhere in the chest but most often at the lower halves.

Fig 3.21: Coarse and dense irregular opacity just below right diaphragm. This is pleural calcification – UNSUITABLE.





Pleural anomalies & pathologies

Fig 3.22: Bilateral and symmetrical thickening along both chest walls. These are hypertrophied intercoastal muscles. They mimic pleural thickening. These hypertrophied intercoastal muscles are usually seen in very muscular individuals – SUITABLE.

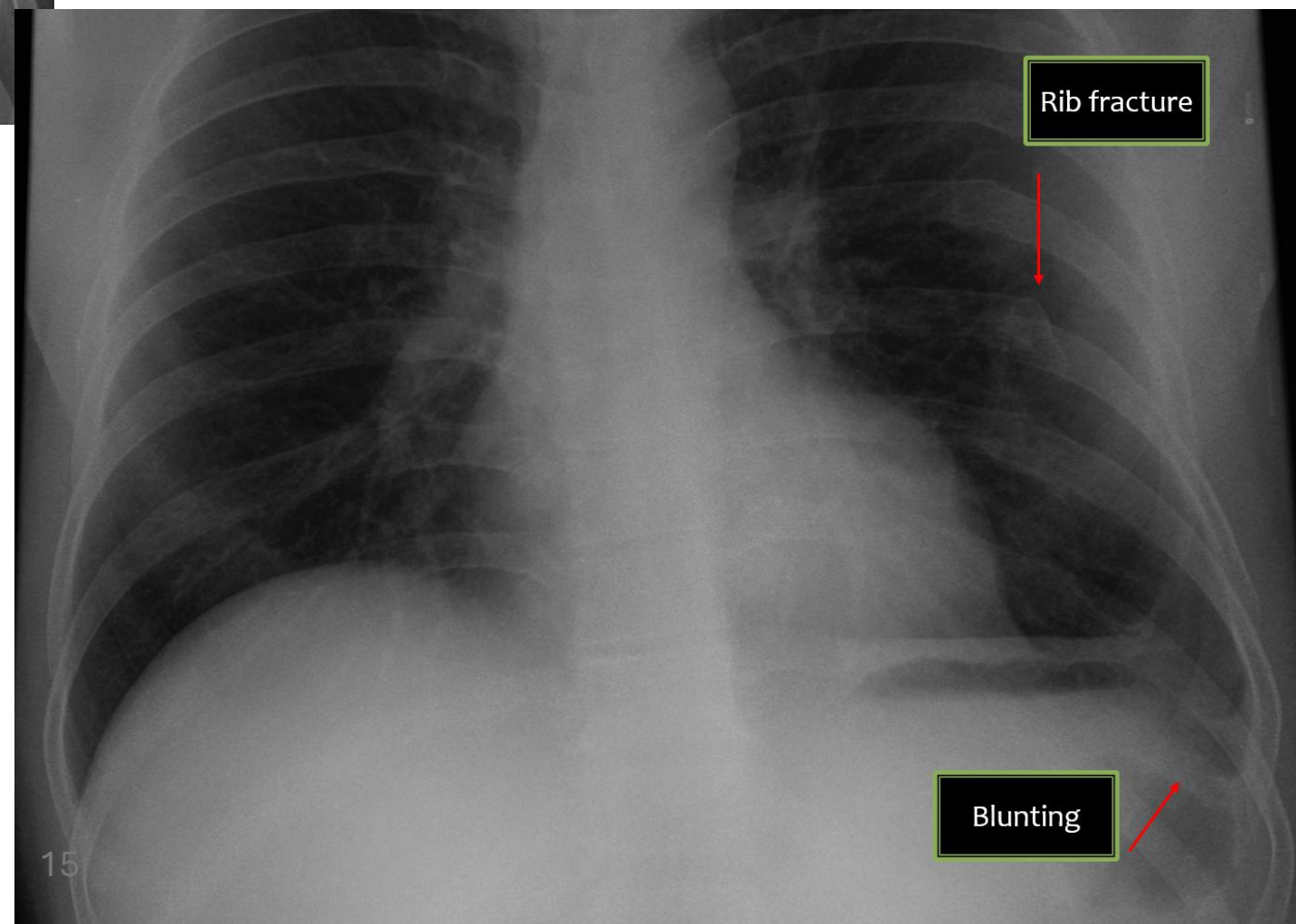


Fig 3.23: The left CPA is blunted but there is an old rib fracture. We can safely assume that the blunting is due to previous chest trauma - SUITABLE.

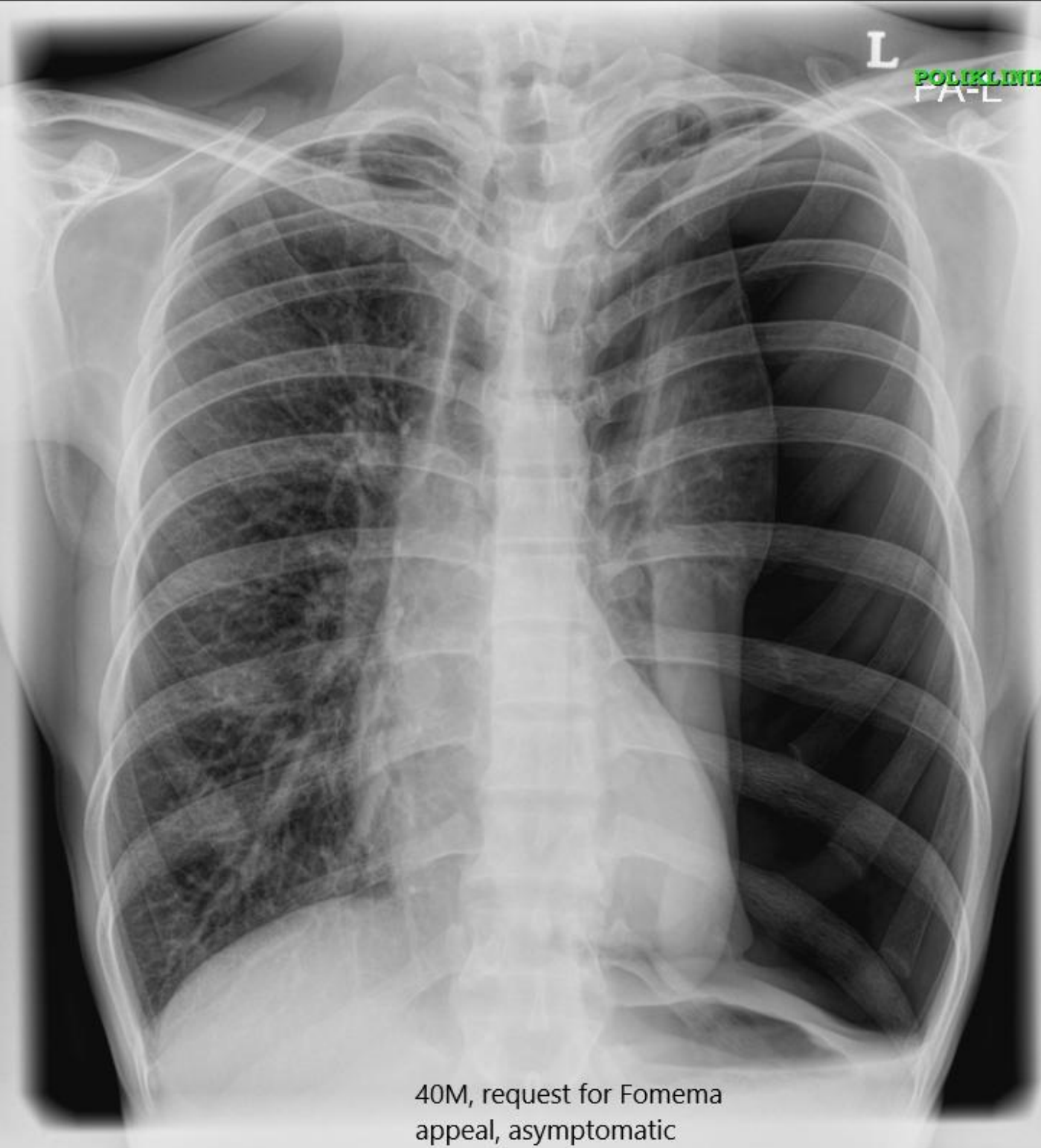


Fig 3.24: Spot diagnosis!

This is a large left sided pneumothorax. Patient is asymptomatic and came for appeal. This is obviously UNSUITABLE.

With such a large pneumothorax, why is patient asymptomatic? The right lung would compensate with hyper-expansion and the pneumothorax gets organised and become chronic.

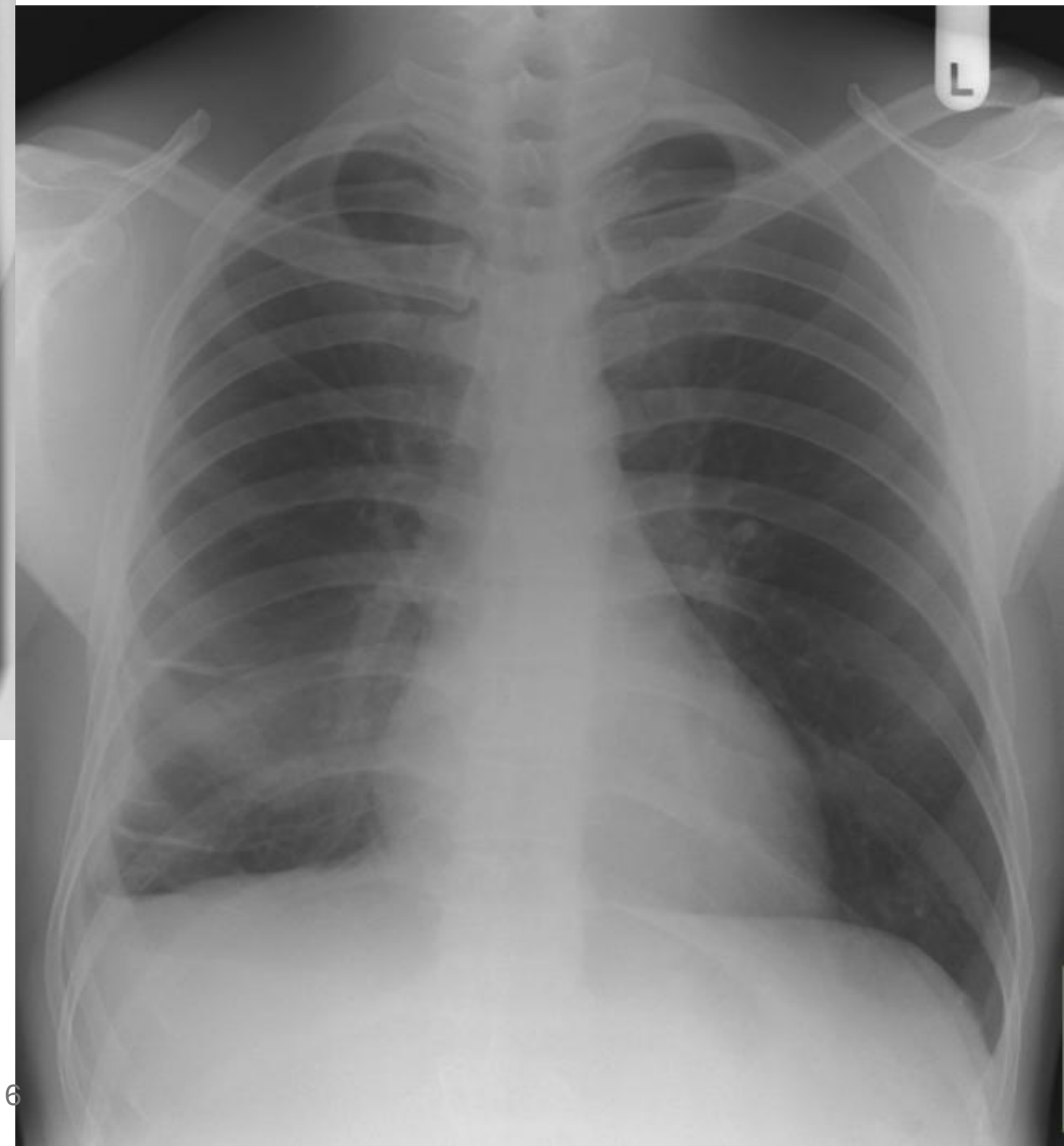


Fig 3.25: Combination of pleural fibrosis and pulmonary fibrosis. The right CP angle is blunted with thickening along lateral chest wall. This is pleural fibrosis.

At the same time, there are thick linear shadows that arise from periphery and extends inwards. These are pulmonary fibrosis.

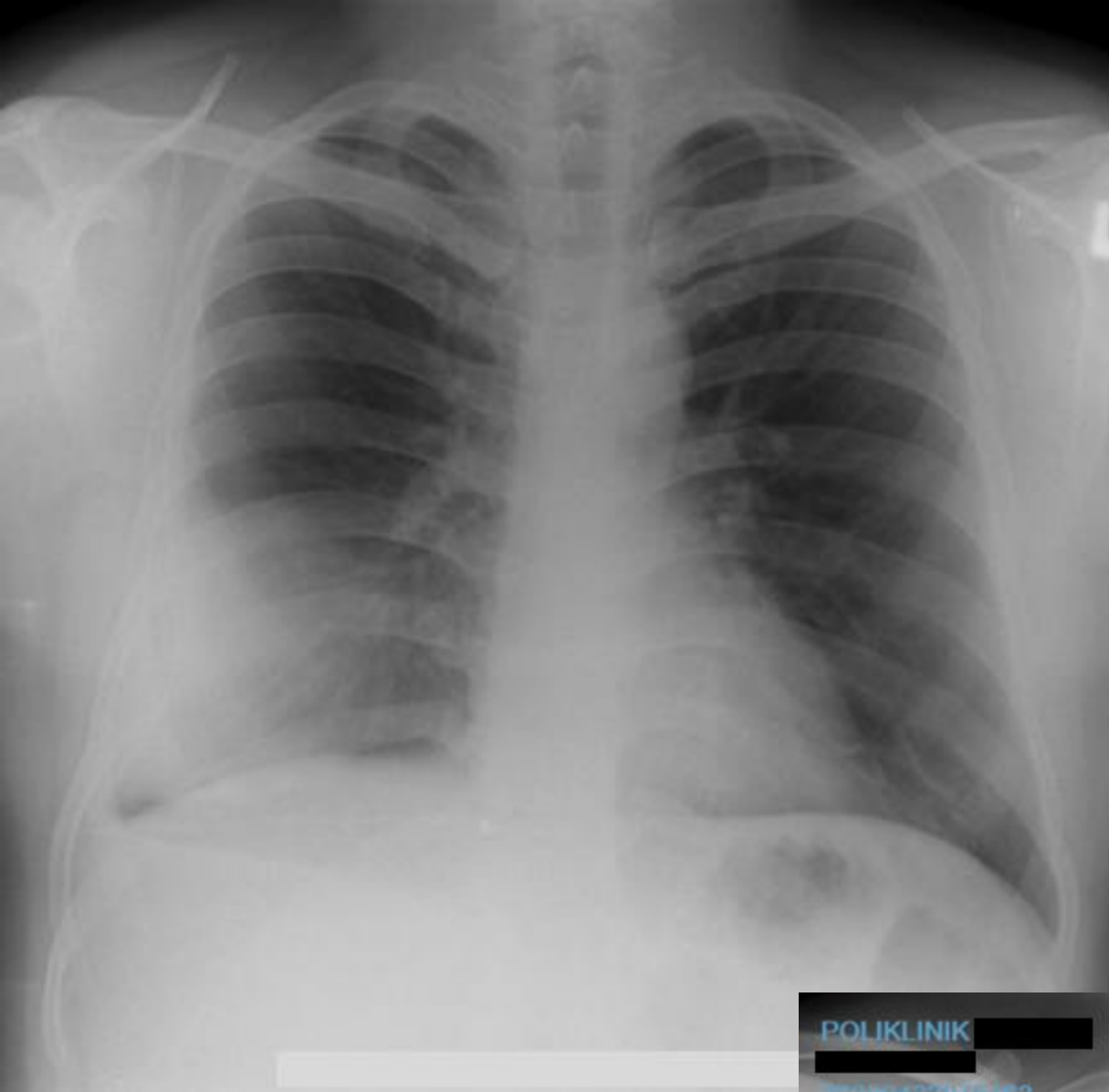


Fig 3.26: Looks rather confusing!

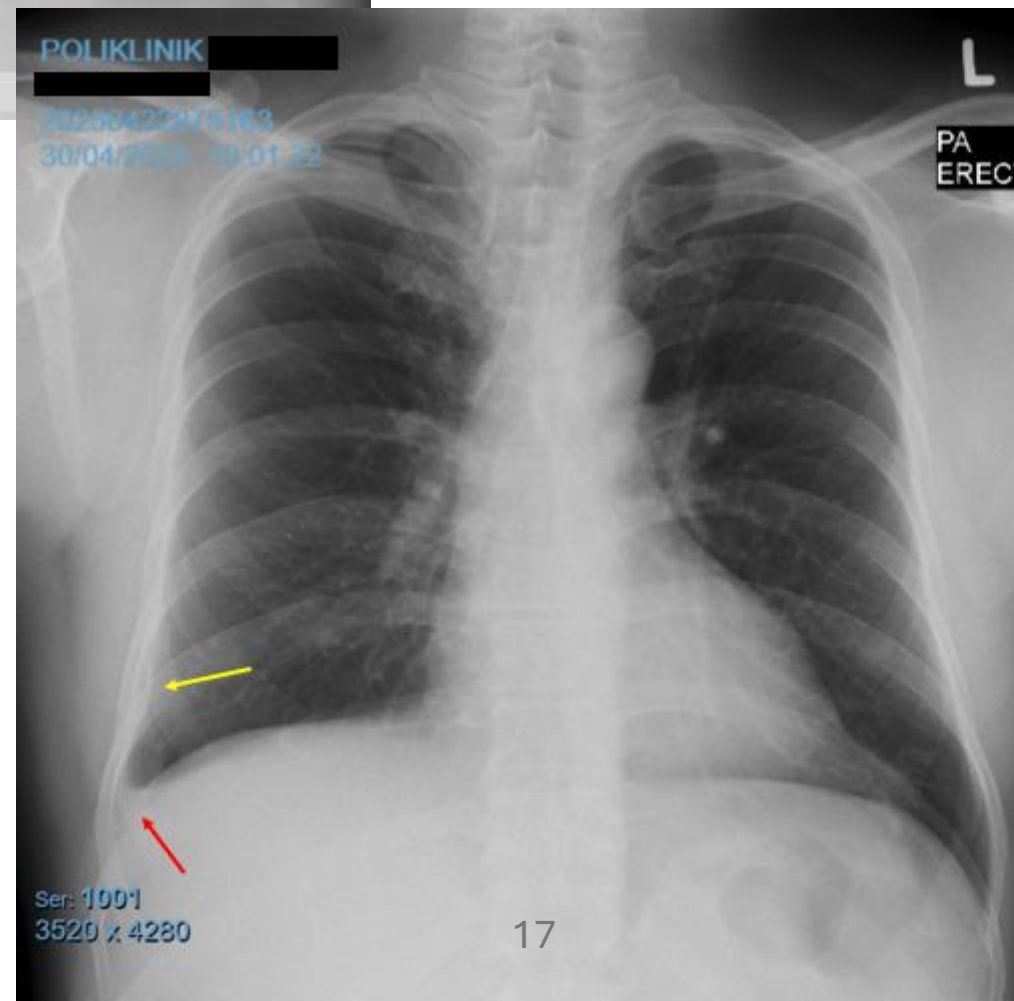
Veil-like opacity right lower zone and blunting right CPA consistent with pleural fibrosis – UNSUITABLE.

Fig 3.27: A good pick up by the doctor. Right CPA is blunted (red arrow) - UNSUITABLE.

Pleural effusion is definitely a possible diagnosis.

But I think, pleural fibrosis is more correct. Why?

1. I assume the worker would be asymptomatic. Effusion is an acute condition while fibrosis is chronic.
2. There s thickening along the lateral chest wall (yellow arrow). This is fibrosis.



<input checked="" type="radio"/> Abnormal	<input type="radio"/> Normal	BLUNTED RIGHT COSTOPHRENIC ANGLE
<input type="radio"/> Yes	<input checked="" type="radio"/> No	
<input type="radio"/> Yes	<input checked="" type="radio"/> No	

PLEURAL EFFUSION

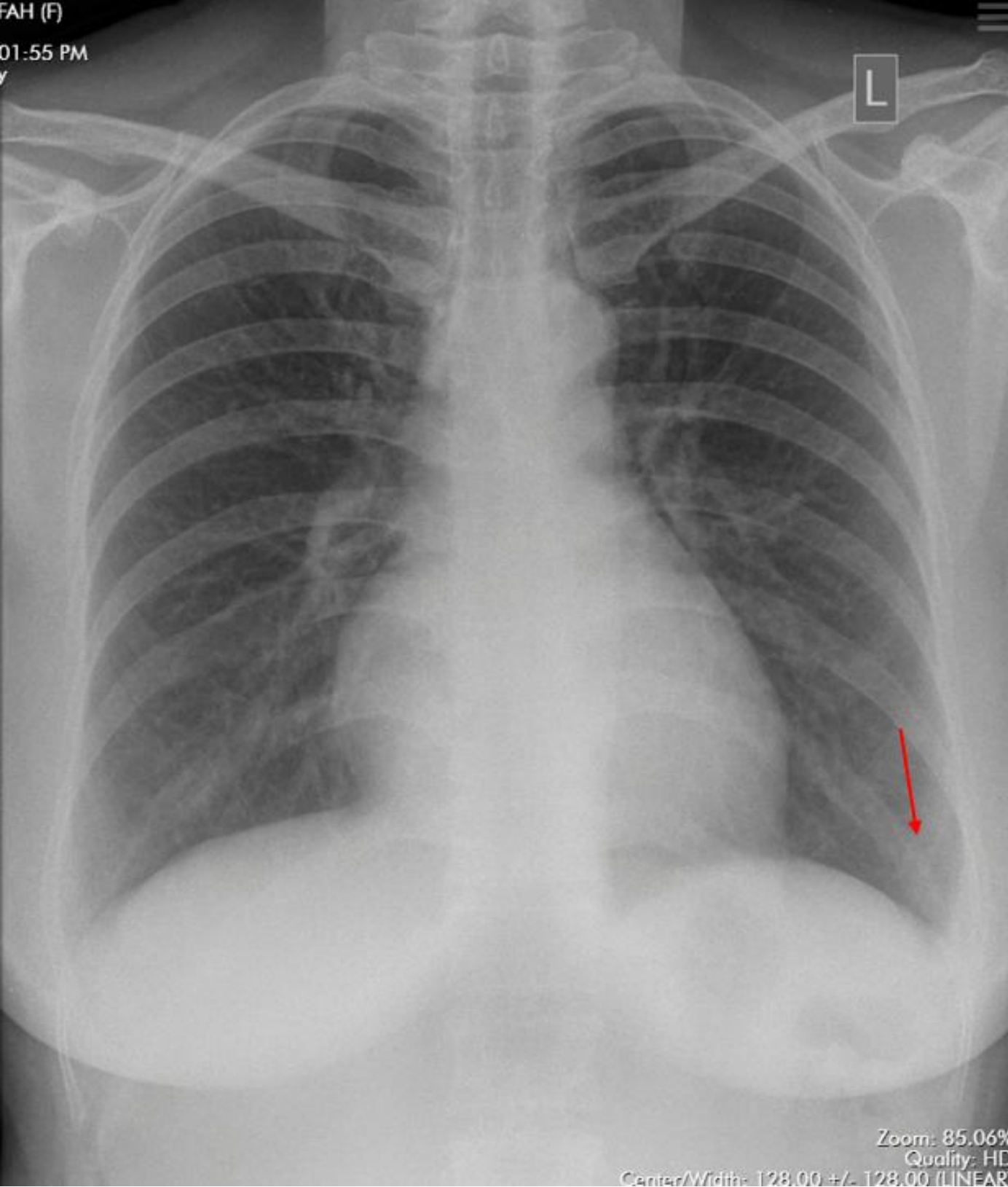


Fig 3.28: Reported as blunting left CPA.

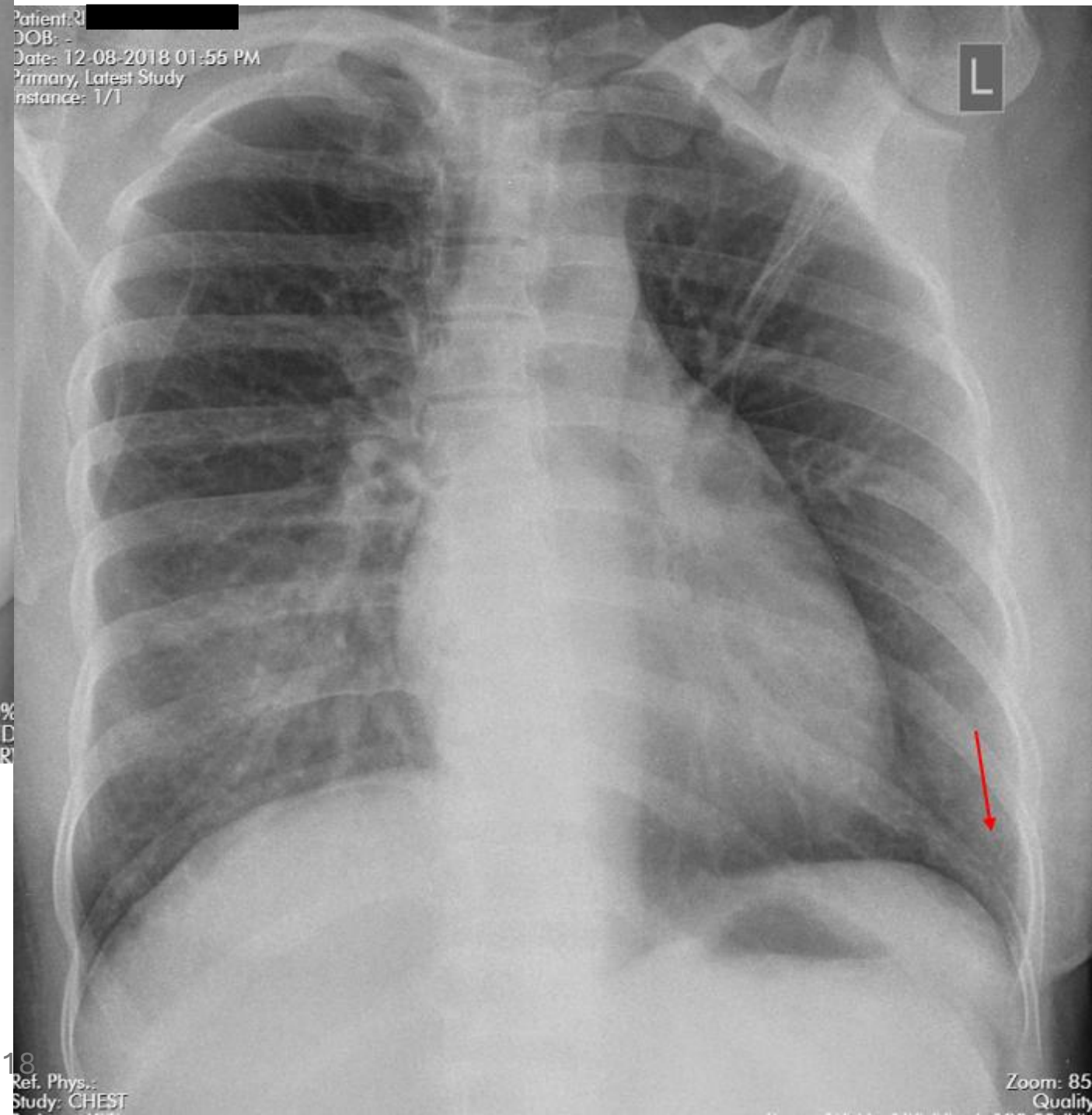
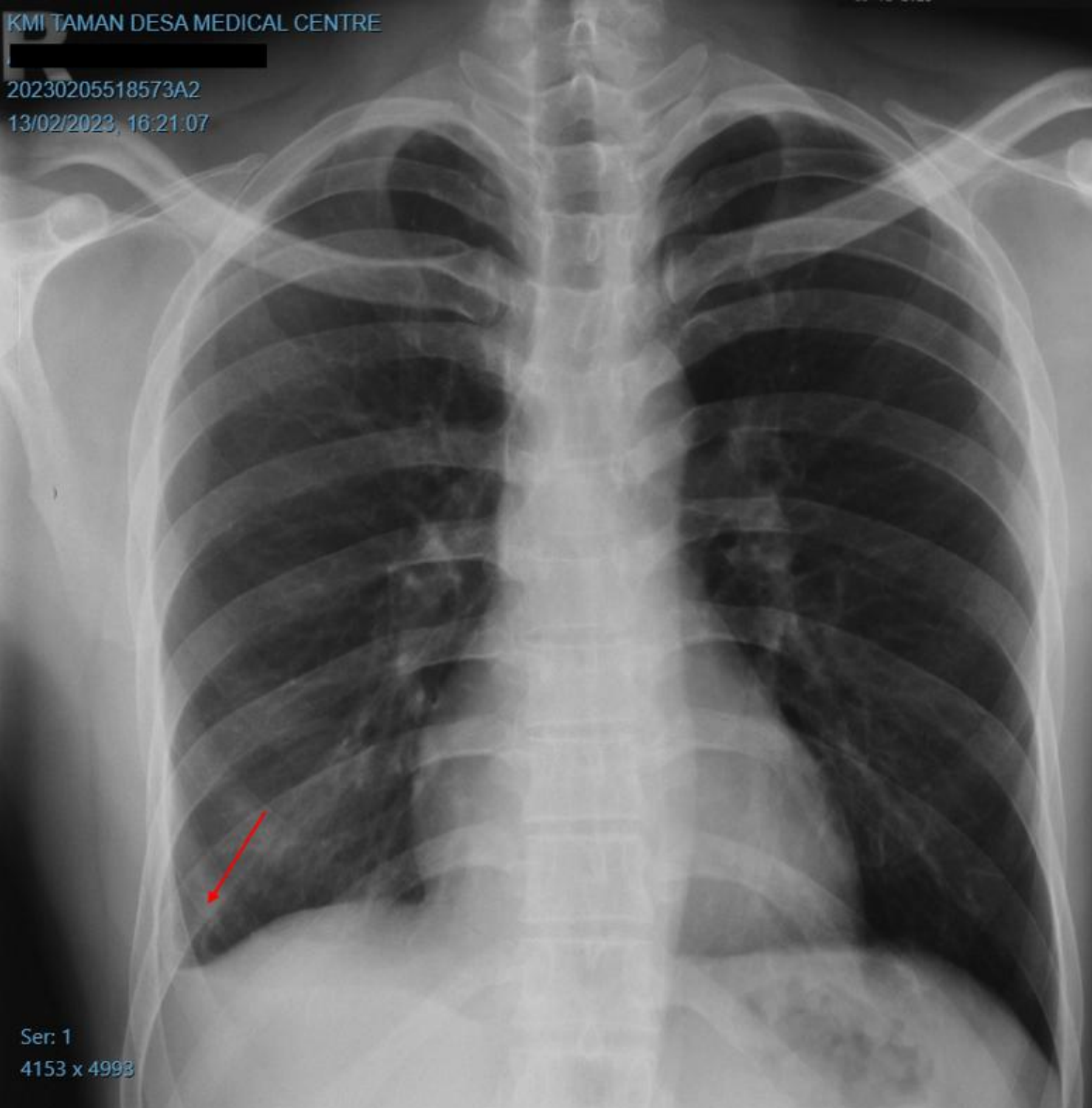


Fig 3.29: LPO view was done as part of appeal image together with PA view. It shows a sharp left CPA!

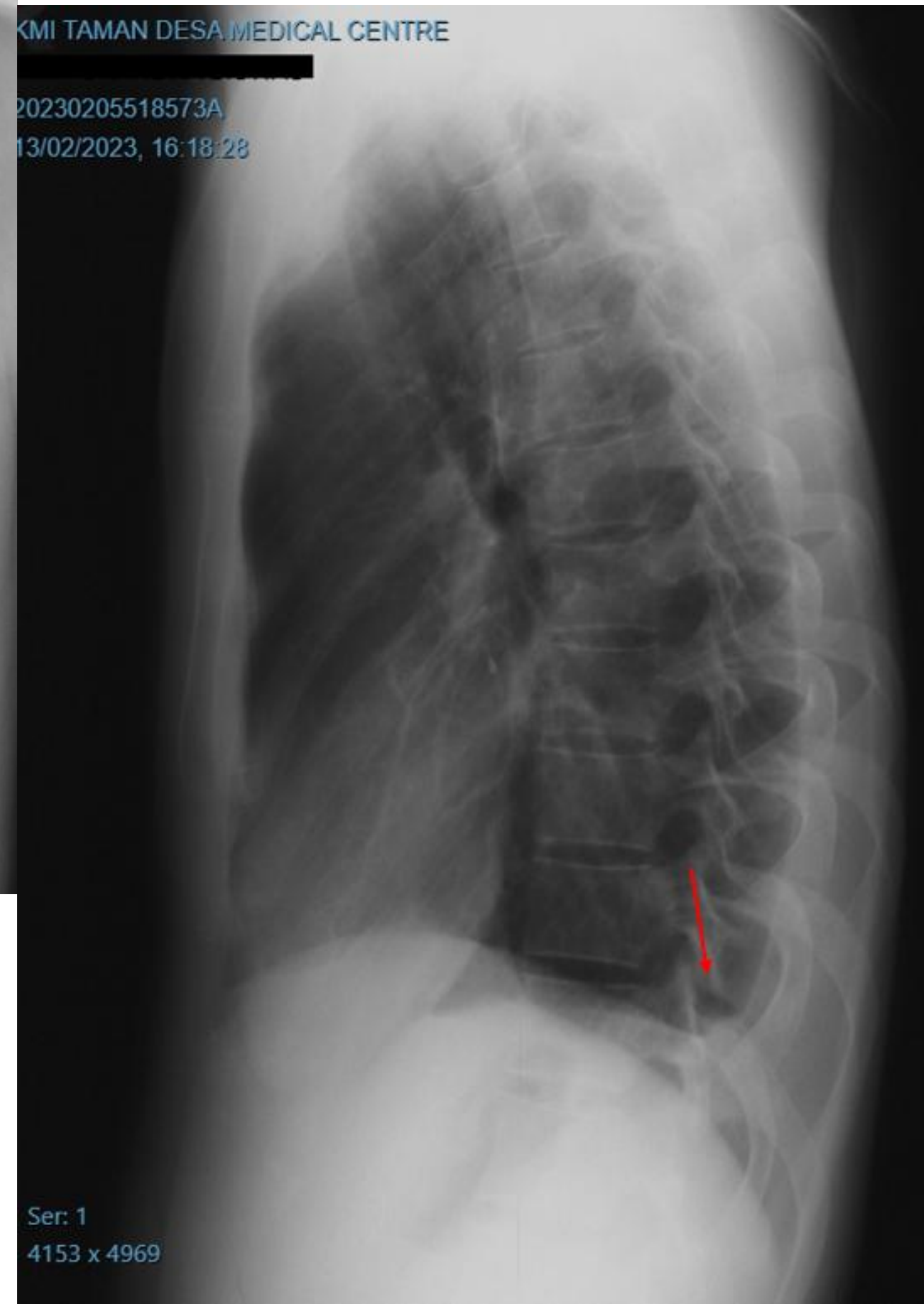
What was seen on PA view is just left breast shadow. Young ladies especially have dense breast and this may obscure CP angles.



Ser: 1
4153 x 4993

Fig 3.30: Blunting right CPA – UNSUITABLE

Your are not sure. I had suggested to do RPO view. But can you do lateral view instead?



Ser: 1
4153 x 4969

Fig 3.31: Lateral view of the same worker showing blunting of posterior right costo-phrenic angle – UNSUITABLE.
Yes, you may do lateral view as well.

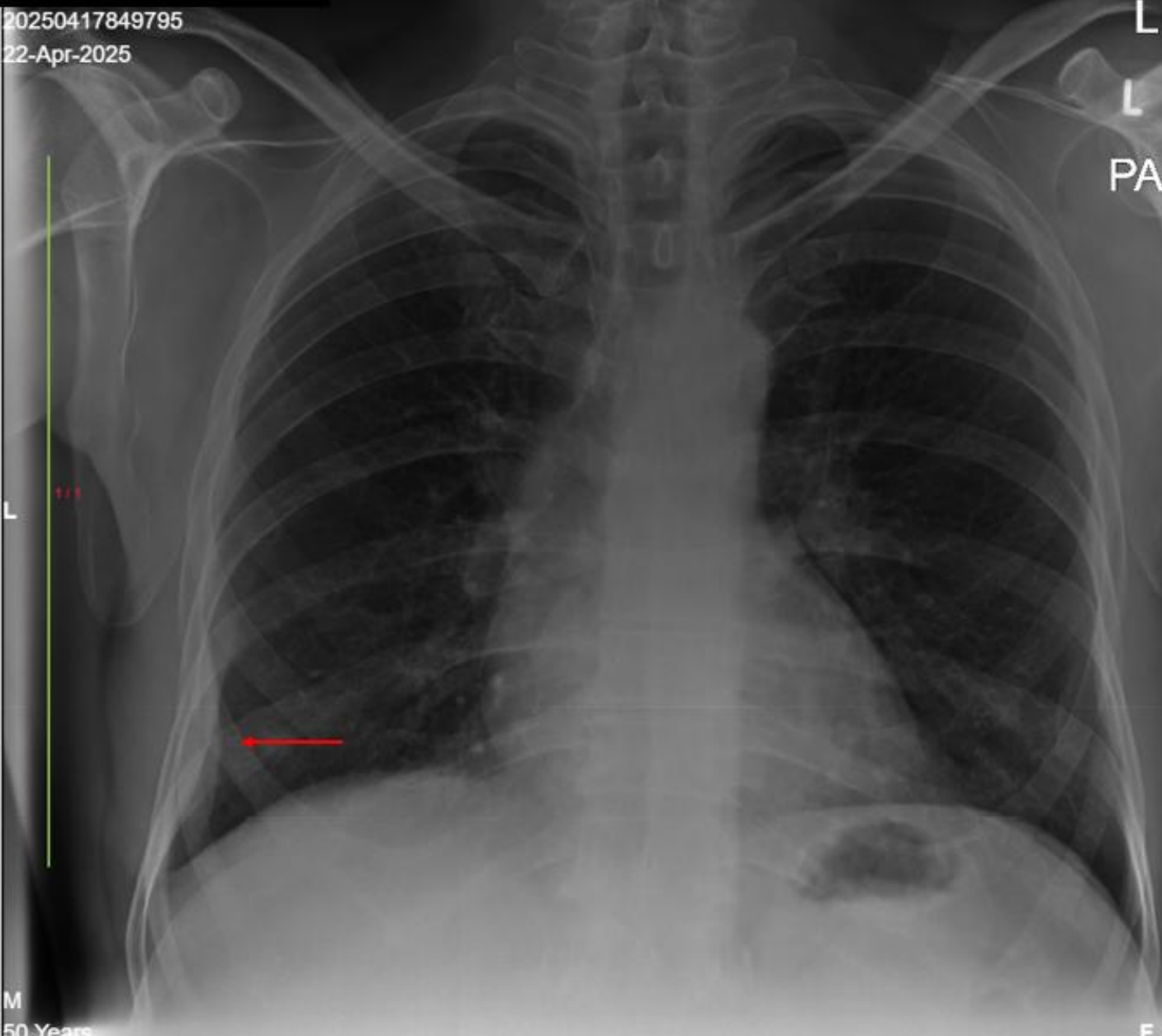


Fig 3.32: Thickening along right lateral chest wall. CP angle by itself is not blunted. SUITABLE or UNSUITABLE?

This is pleural thickening – most often due to empyema, and therefore UNSUITABLE.

Be careful with thickened intercoastal muscles – often seen in very muscular man. Thickened intercoastal muscles would be bilateral (sometimes unilateral & follow dominant hand), symmetrical (or almost symmetrical) and wavy in appearance (follows intercoastal spaces)

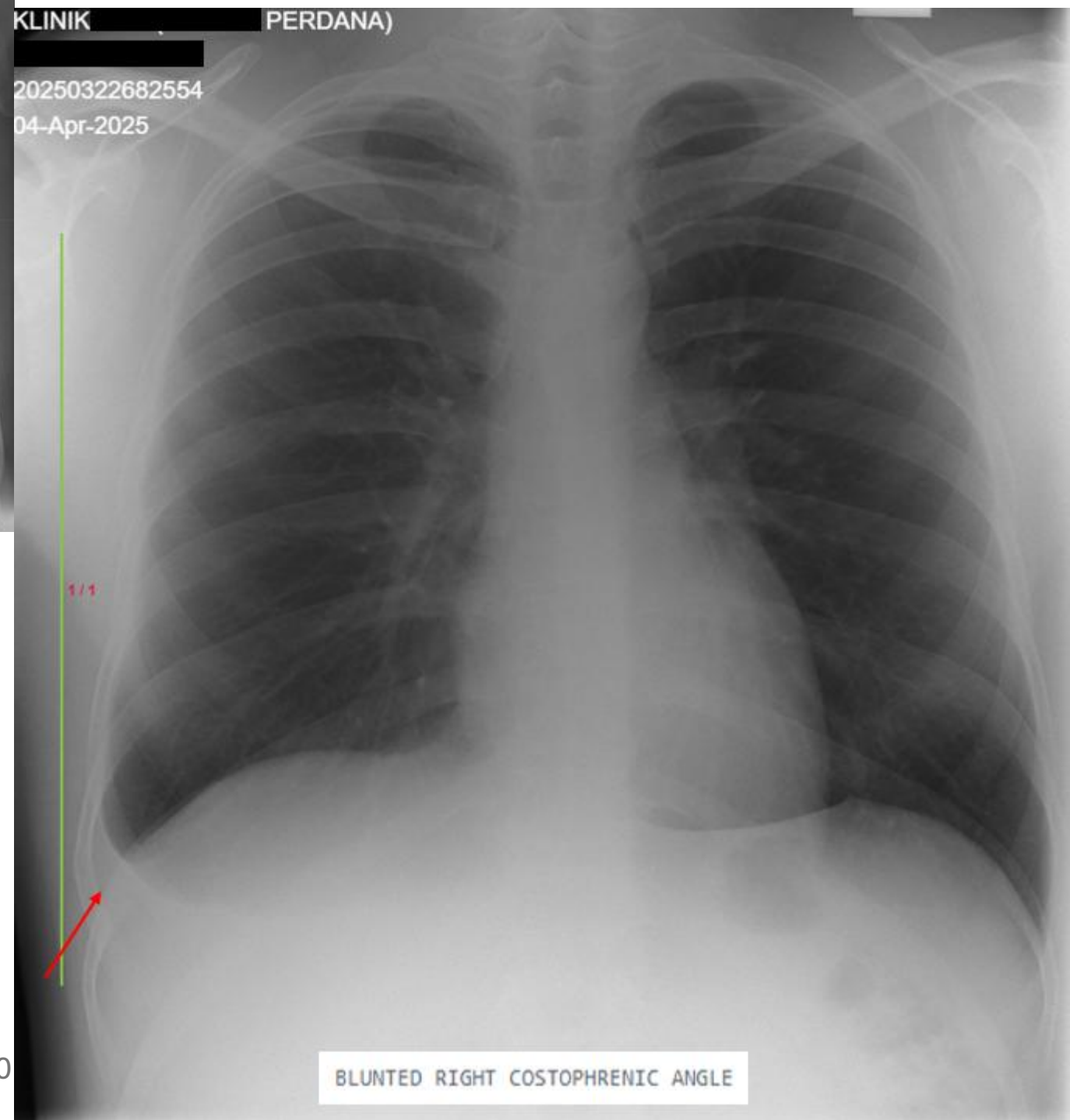


Fig 3.33: Reported as blunted right CPA - UNSUITABLE.

Do you agree?

This is just due to over-inspiration – SUITABLE.

There is no thickening along right lateral chest wall.

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Fig 3.34: Left CPA – blunting or no blunting?

This is a congenitally straight diaphragm – SUITABLE.

How come its suitable?

Refer to figure 3.9 – there is no thickening of left lateral chest wall.

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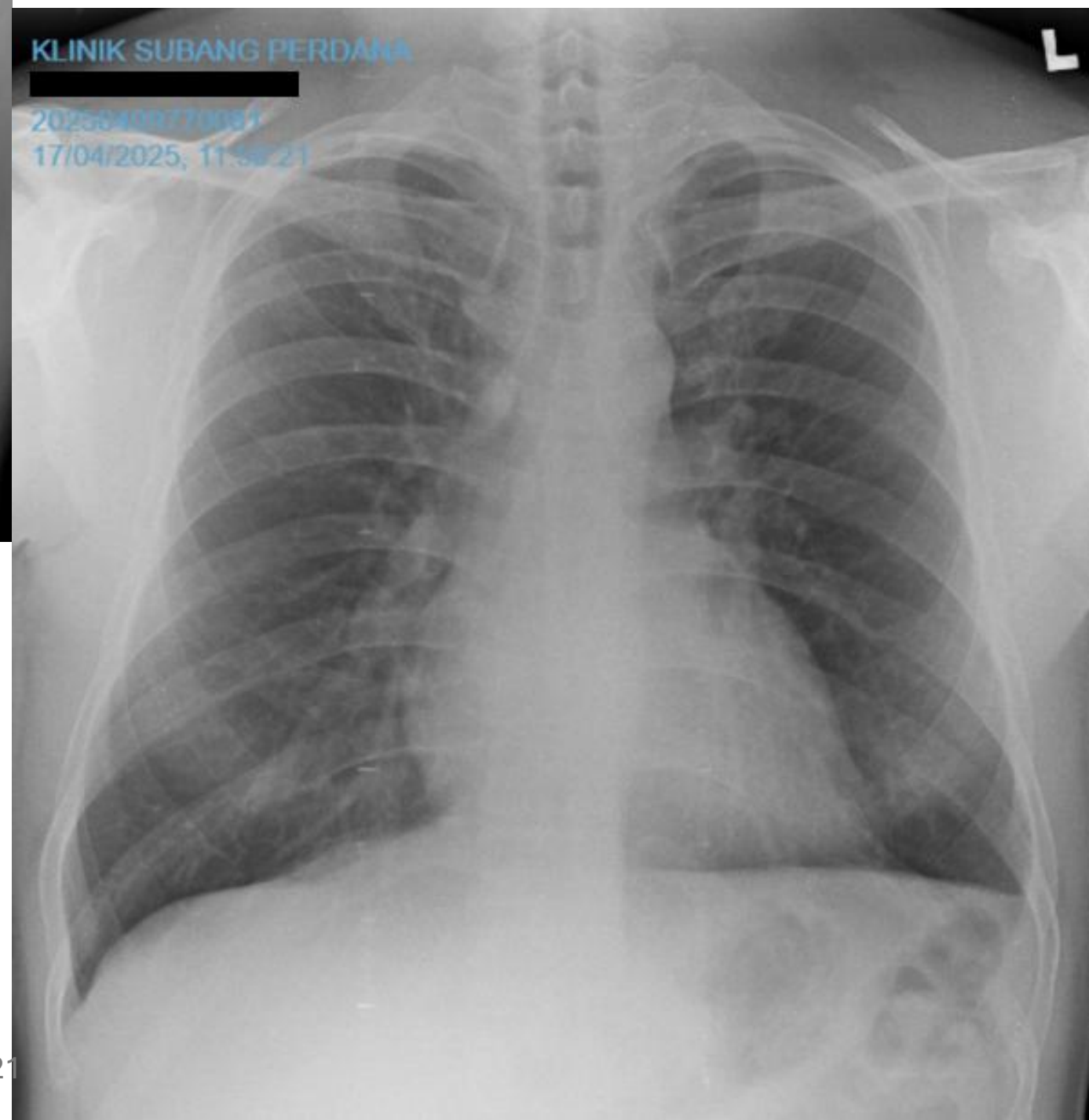


Fig 3.35: Another straight left hemi-diaphragm – SUITABLE.

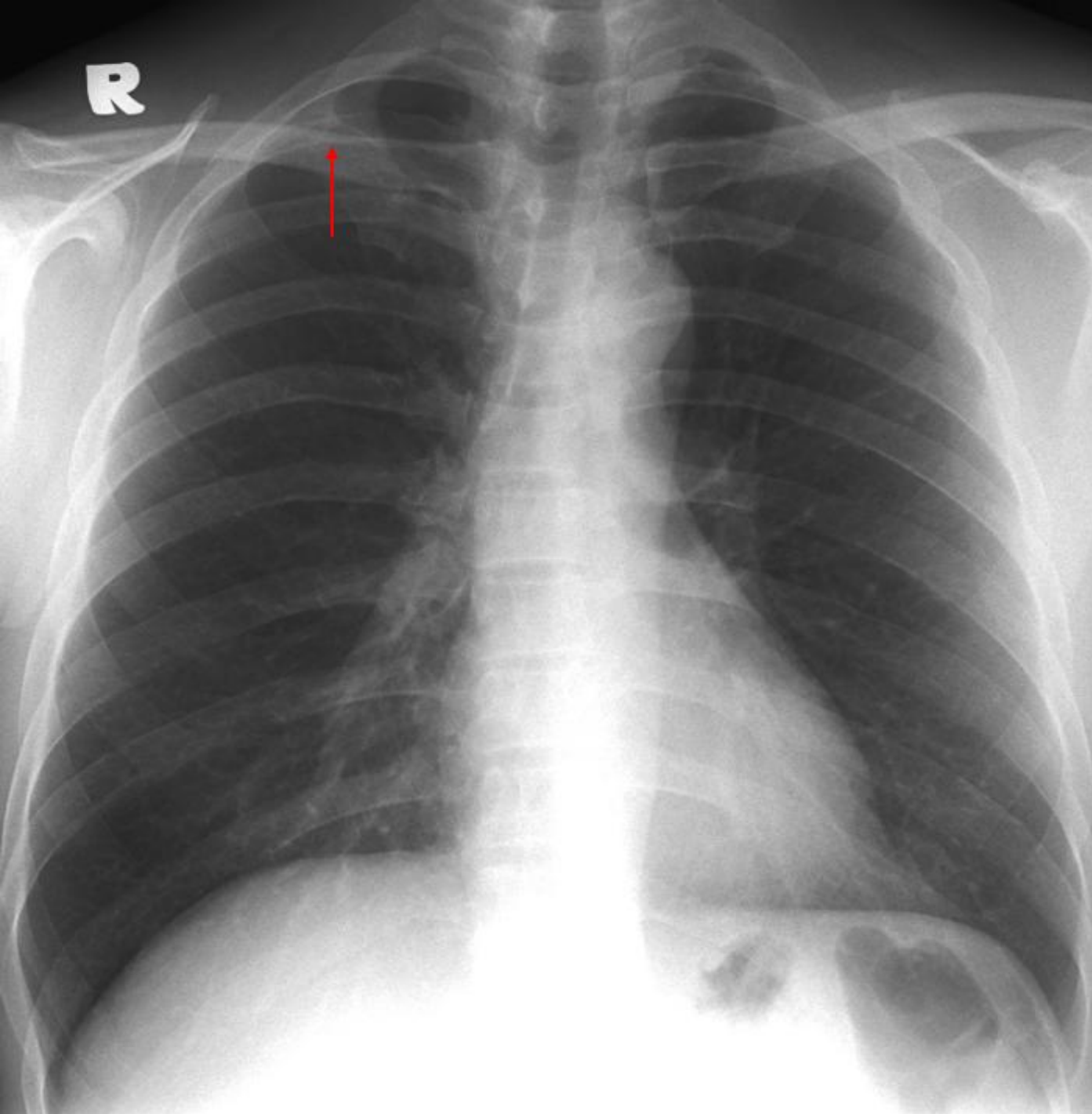


Fig 3.36: Pleural tag - SUITABLE.

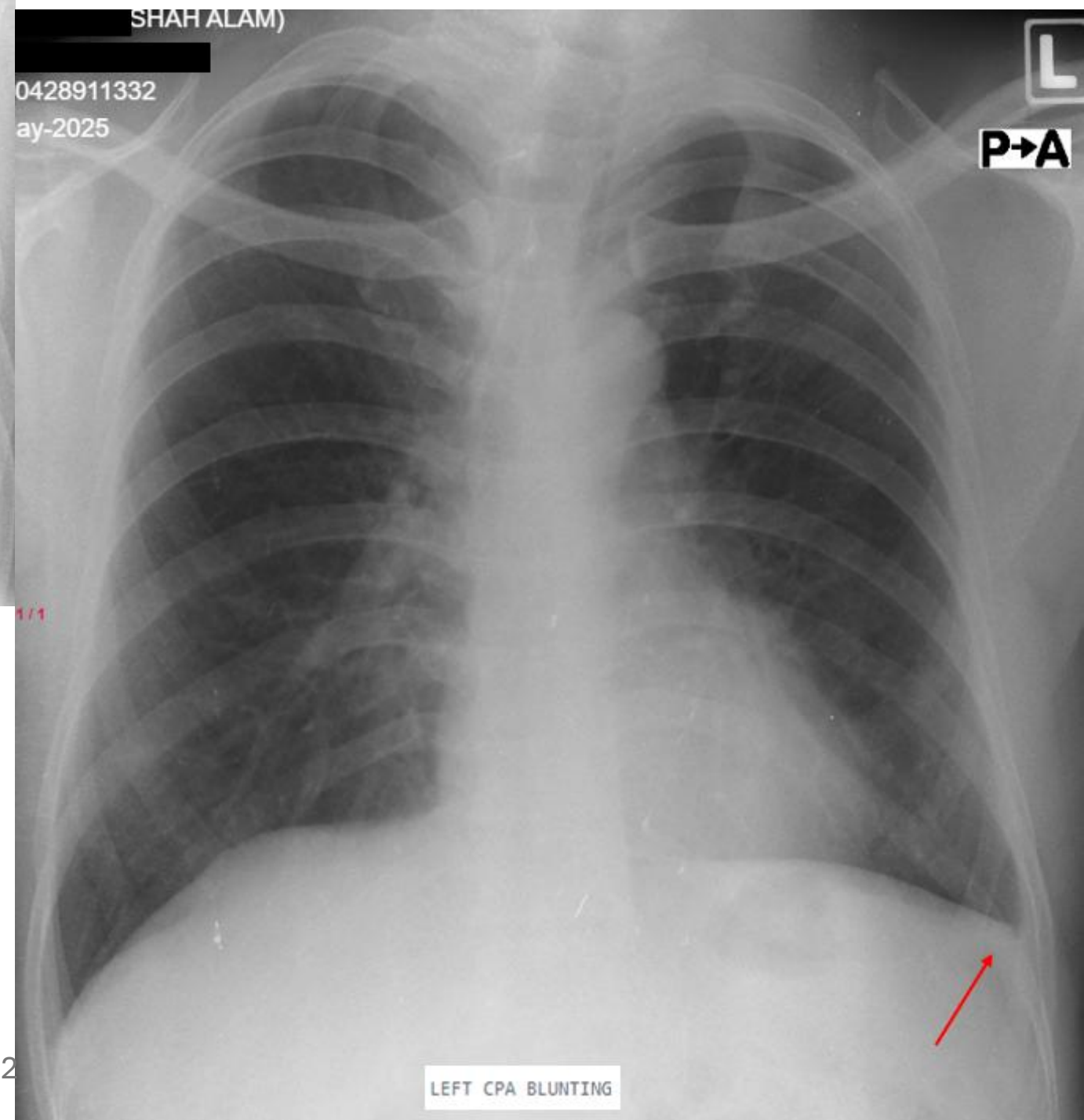


Fig 3.37: Blunting left CPA – do you agree?
Look at it carefully. What looks like thickened pleura is actually part of left 8th rib. There is no blunting!

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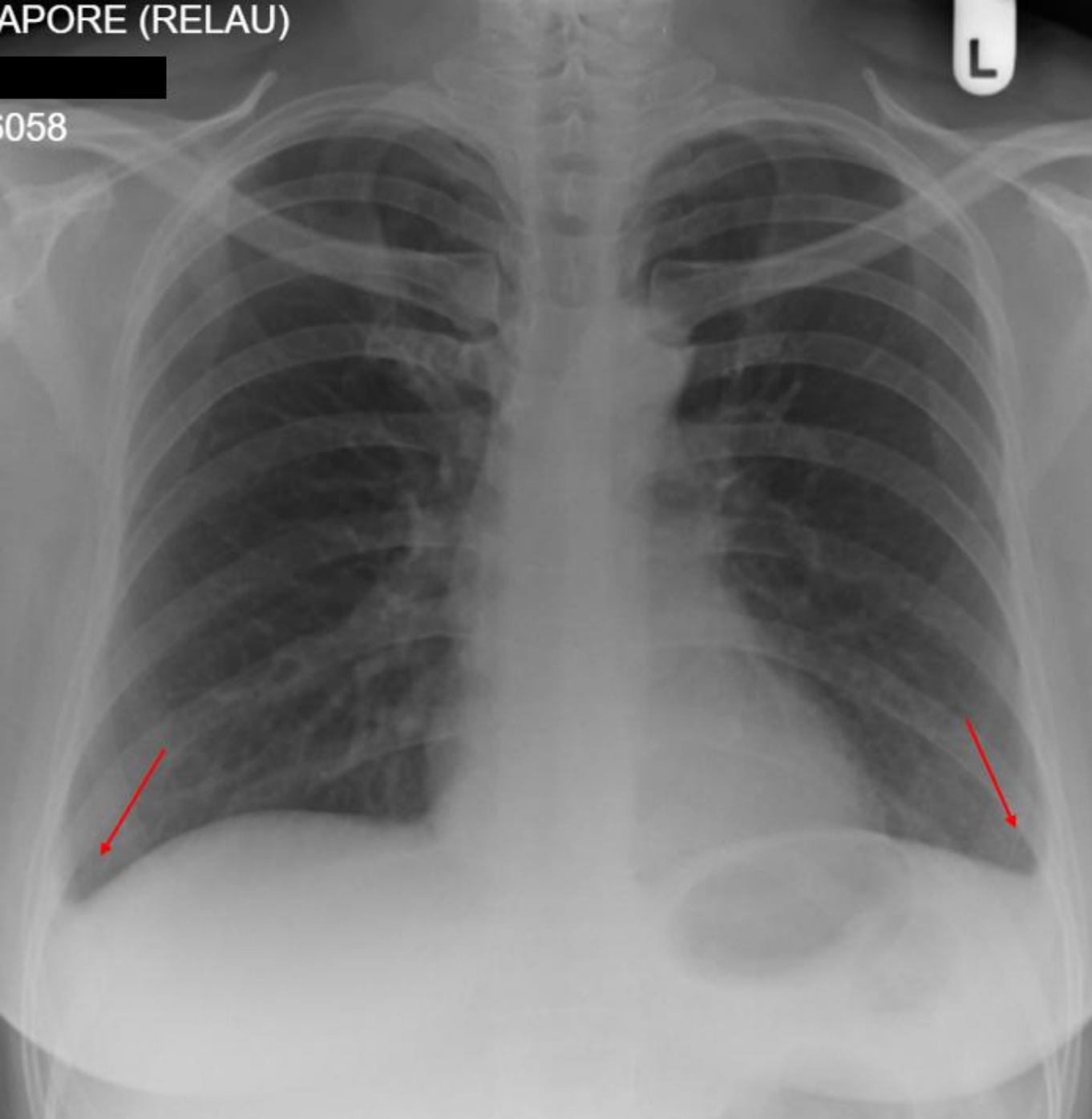
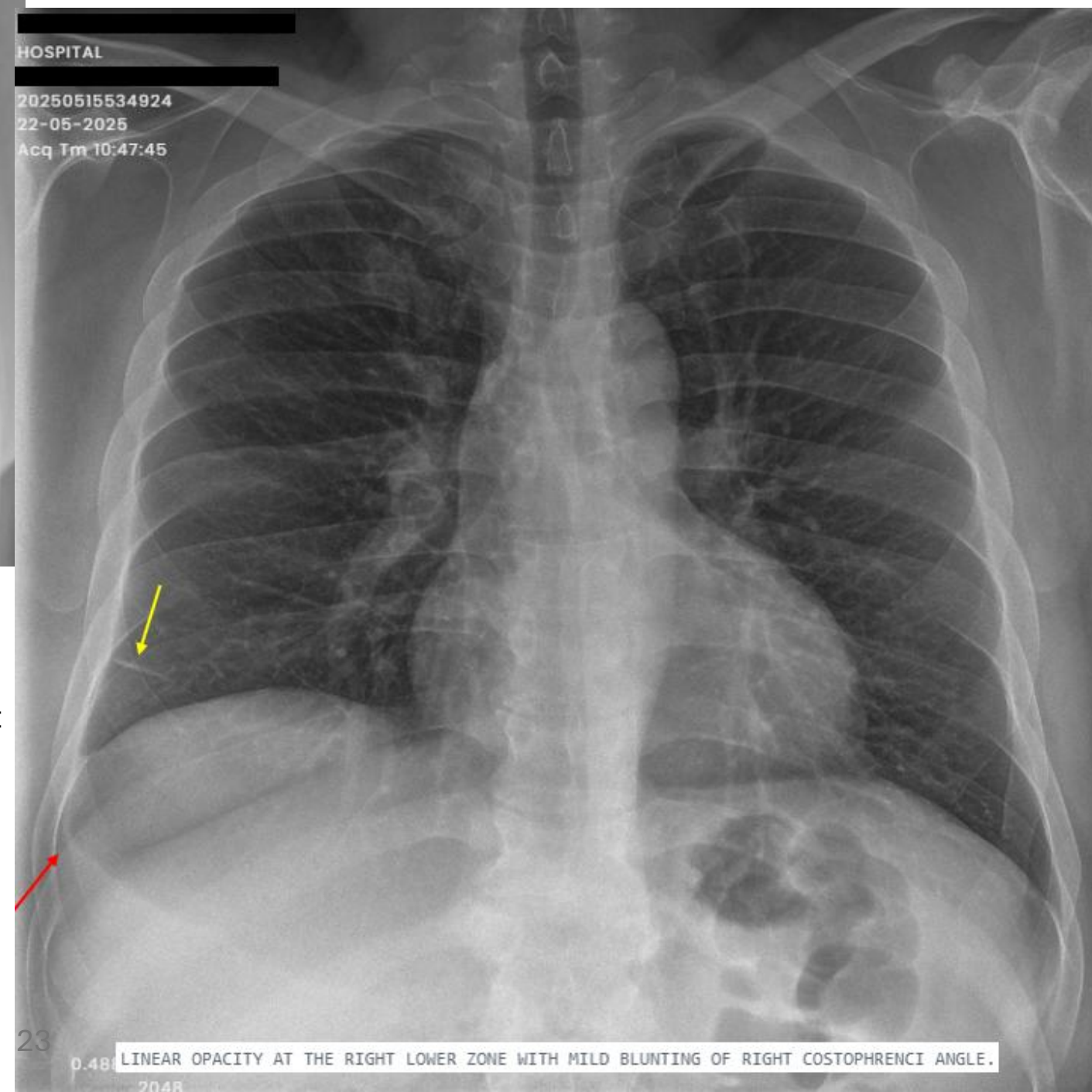


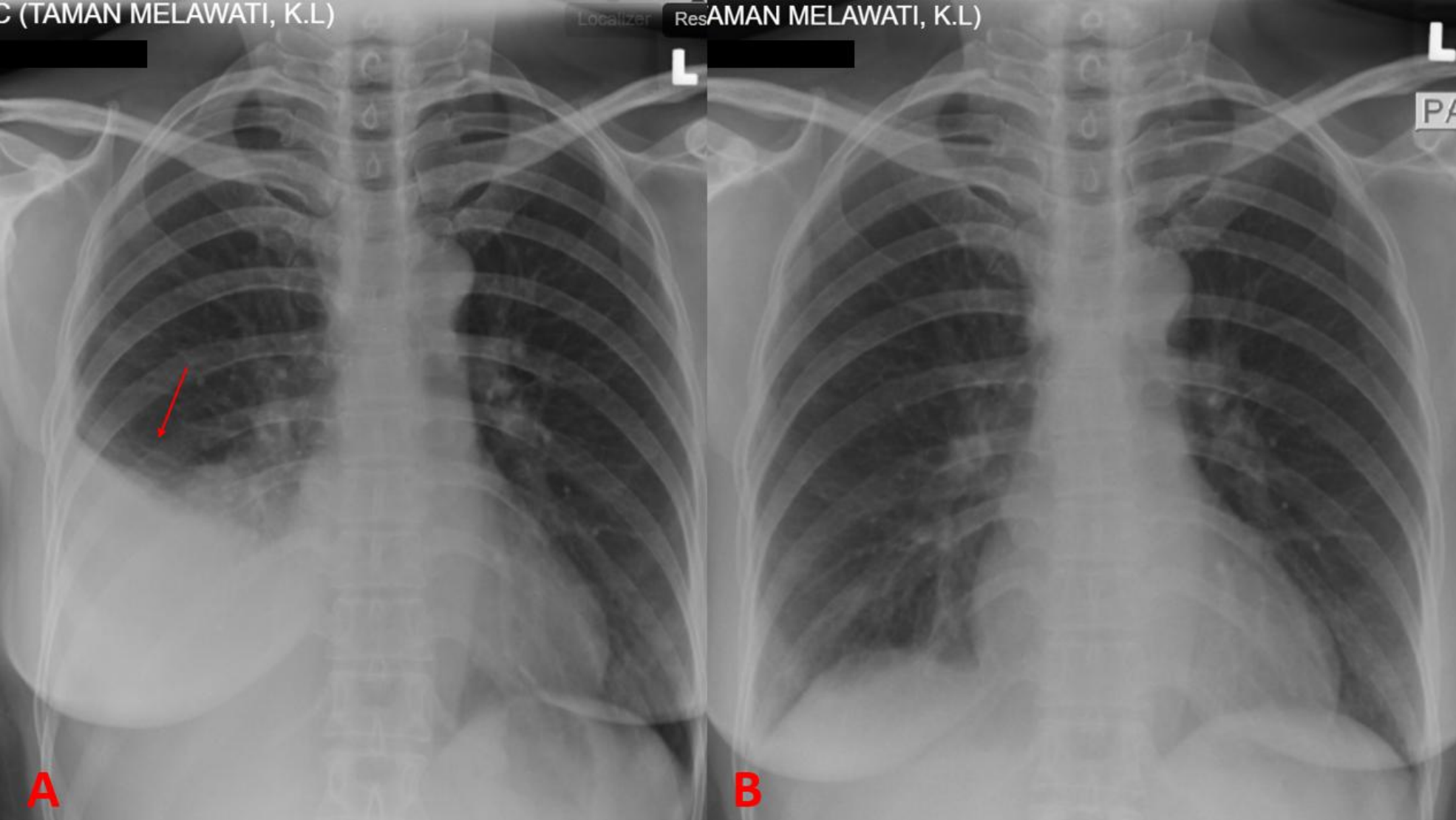
Fig 3.38: Blunting both CPAs – do you agree?
No, this is just due to overlying breast shadow. There is no blunting.

Fig 3.39: Reported as linear opacity at RLZ with mild blunting of right CPA – UNSUITABLE.

There are 2 issues here:

- Linear shadow: this is just 1 single linear shadow which is considered SUITABLE by the criteria.
- Blunting: this blunting is due to over-inspiration, not pleural fibrosis and therefore SUITABLE.





Pleural anomalies & pathologies

Fig 3.40: Pleural effusion

A: Pleural effusion – UNSUITABLE.
B: After treatment – SUITABLE

Please be reminded that under Fomema screening programme, treatment is not included. If you wish to do so, you may proceed. The cost is on the workers. We will assess suitability based on the appeal images (not on treatment that was given).

POLIKLINIK & SURGERI

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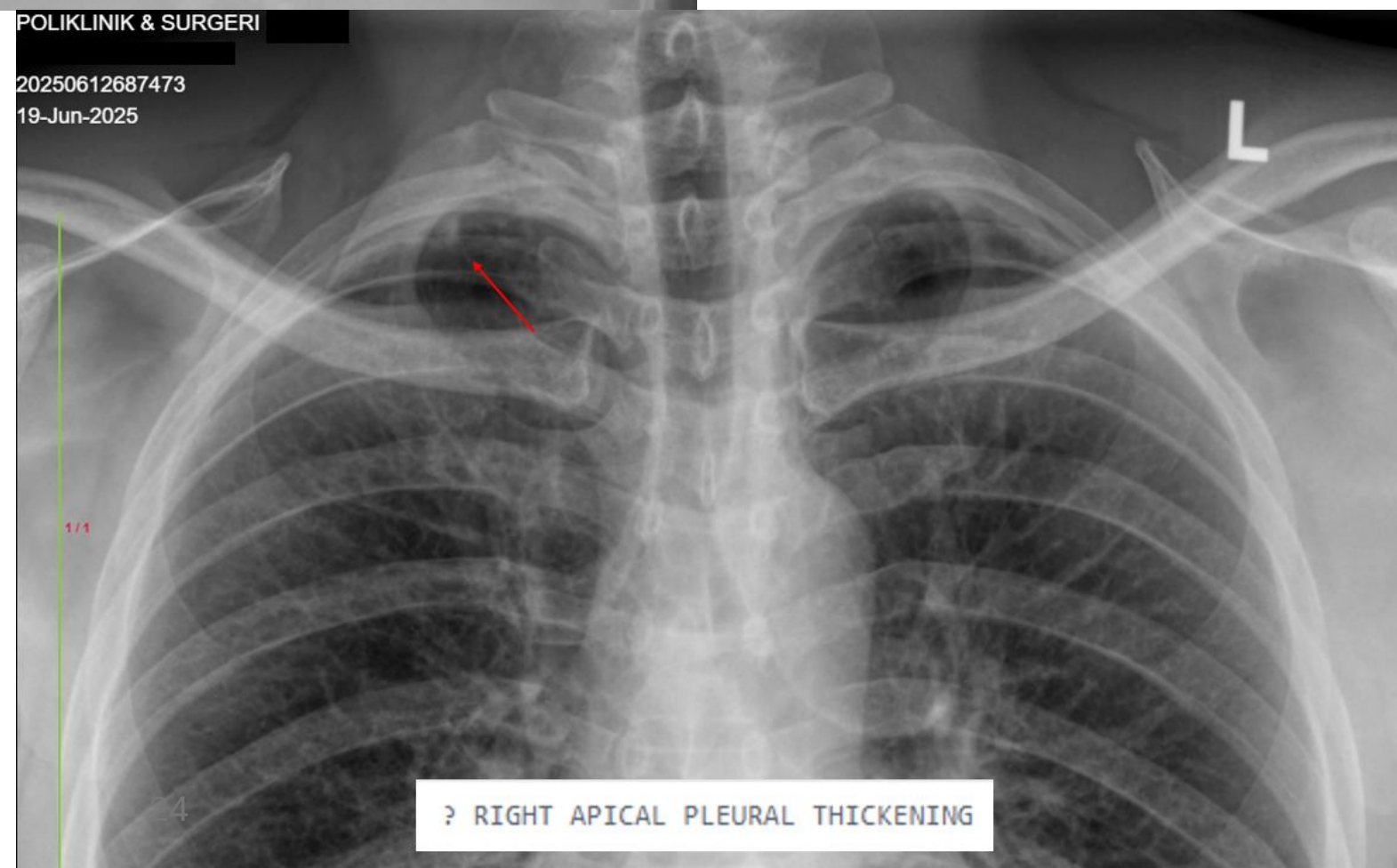


Fig 3.41: Doctor had rightfully queried right apical pleural thickening.
This is pleural cap - SUITABLE

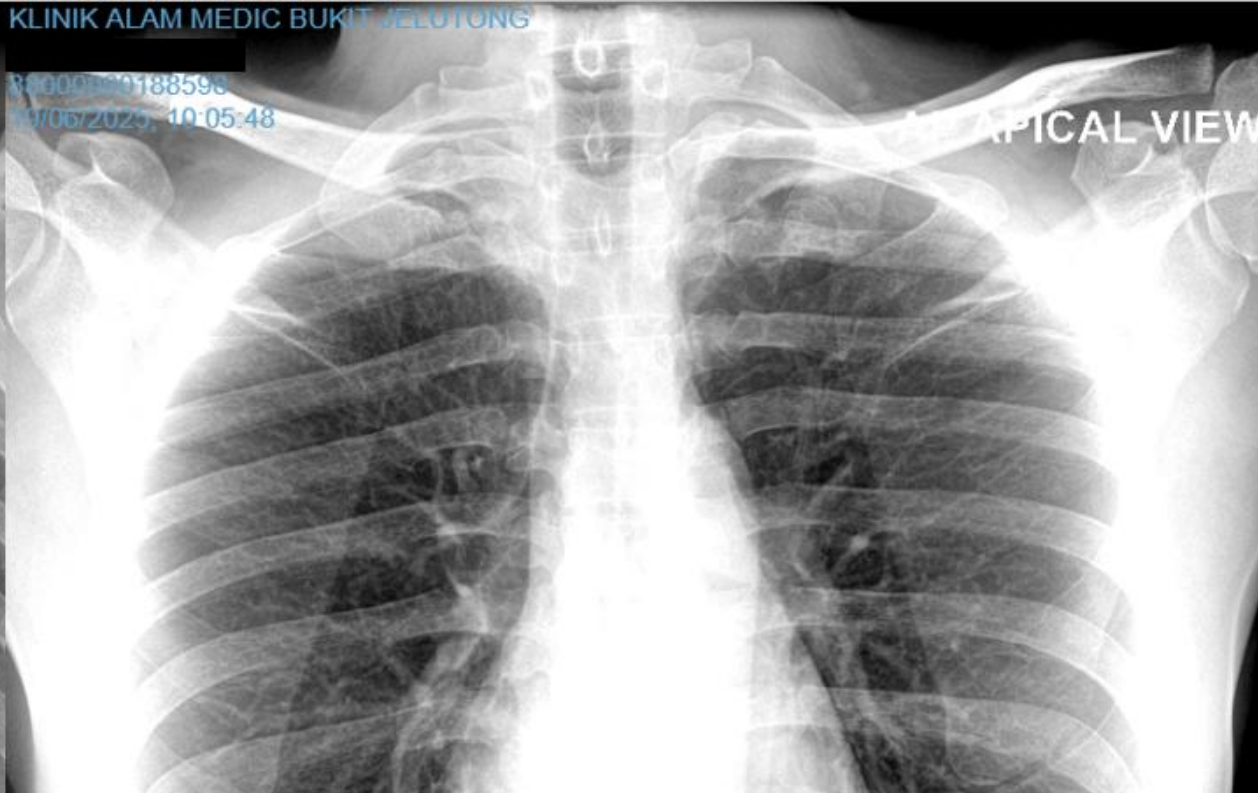
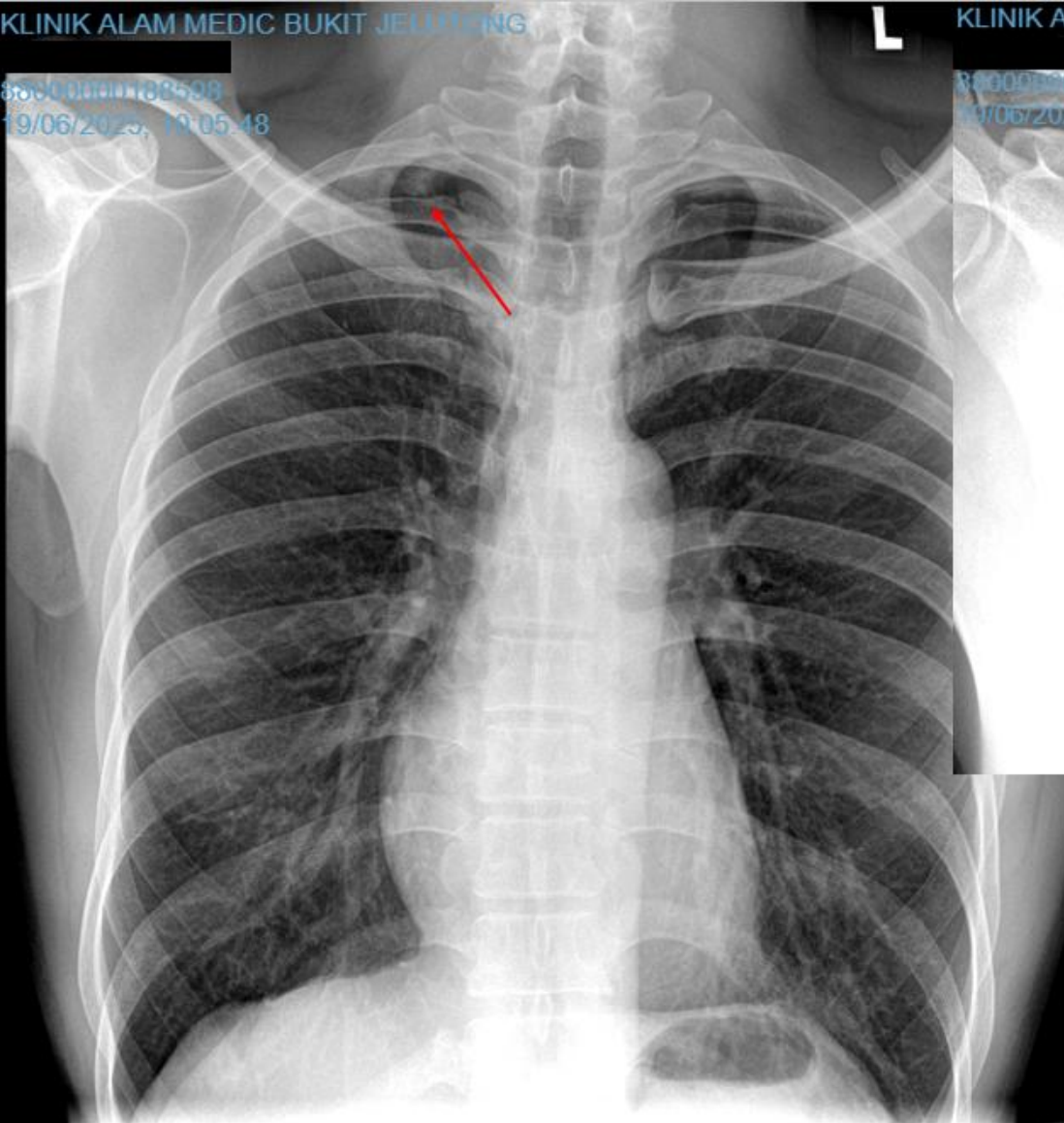


Fig 3.42: Right pleural cap seen on PA view but not apical view - SUITABLE

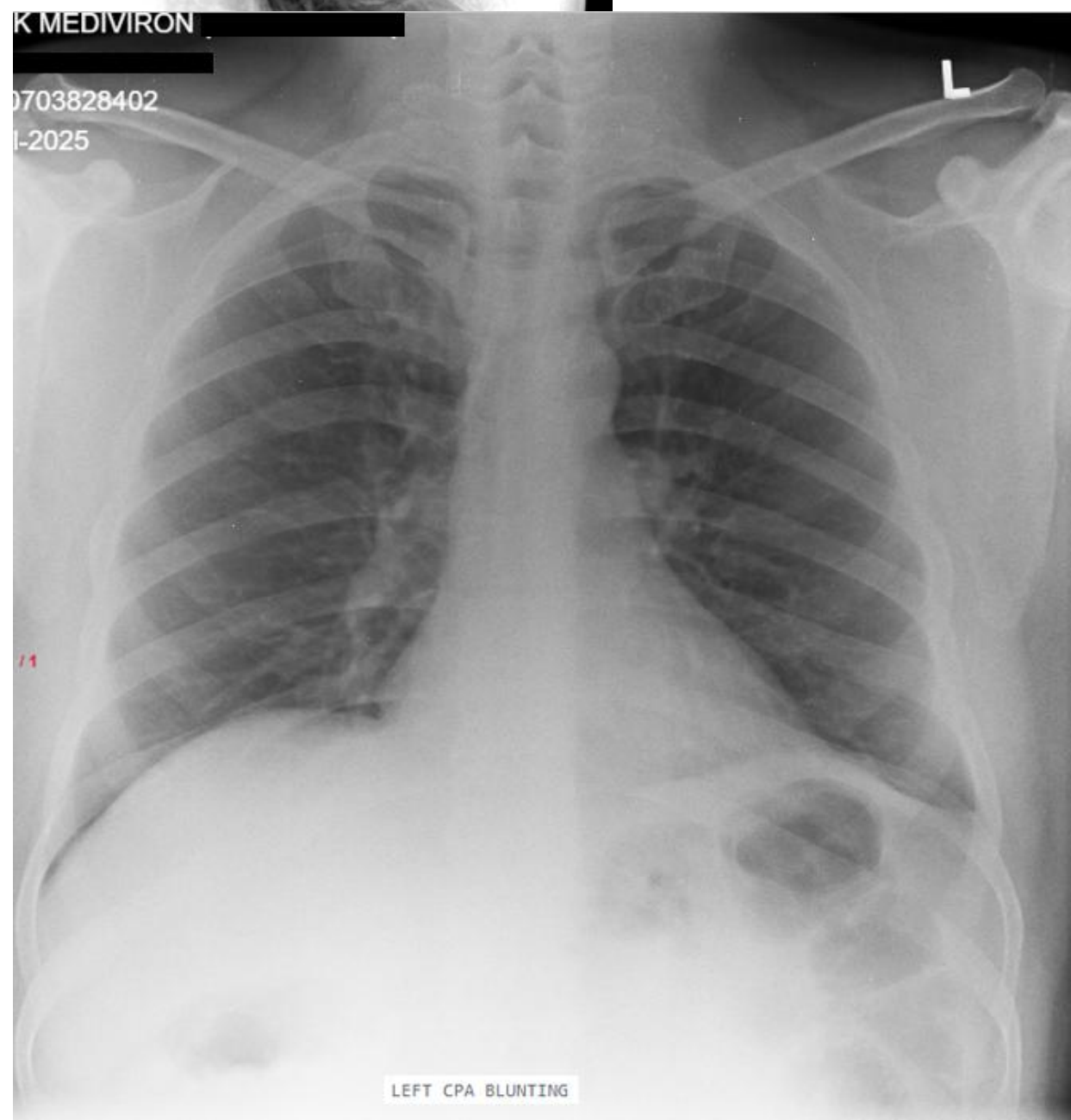


Fig 3.43: Reported as blunting left CPA. There is no thickening along left lateral chest wall – this is SUITABLE

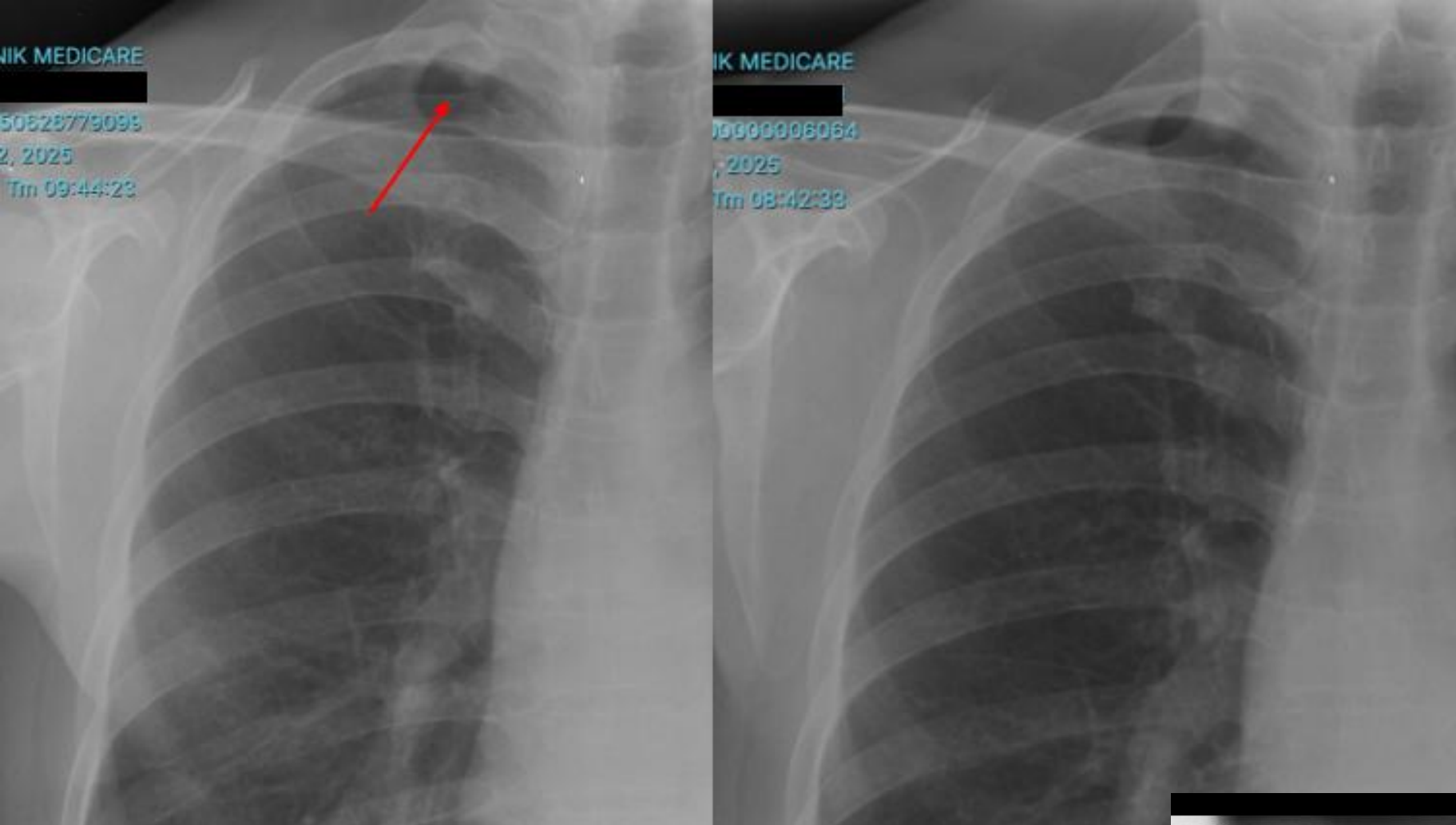


Fig 3.44: In the 1st image, the pleura appears thickened. Image was repeated and normal. This is just neck shadow - SUITABLE

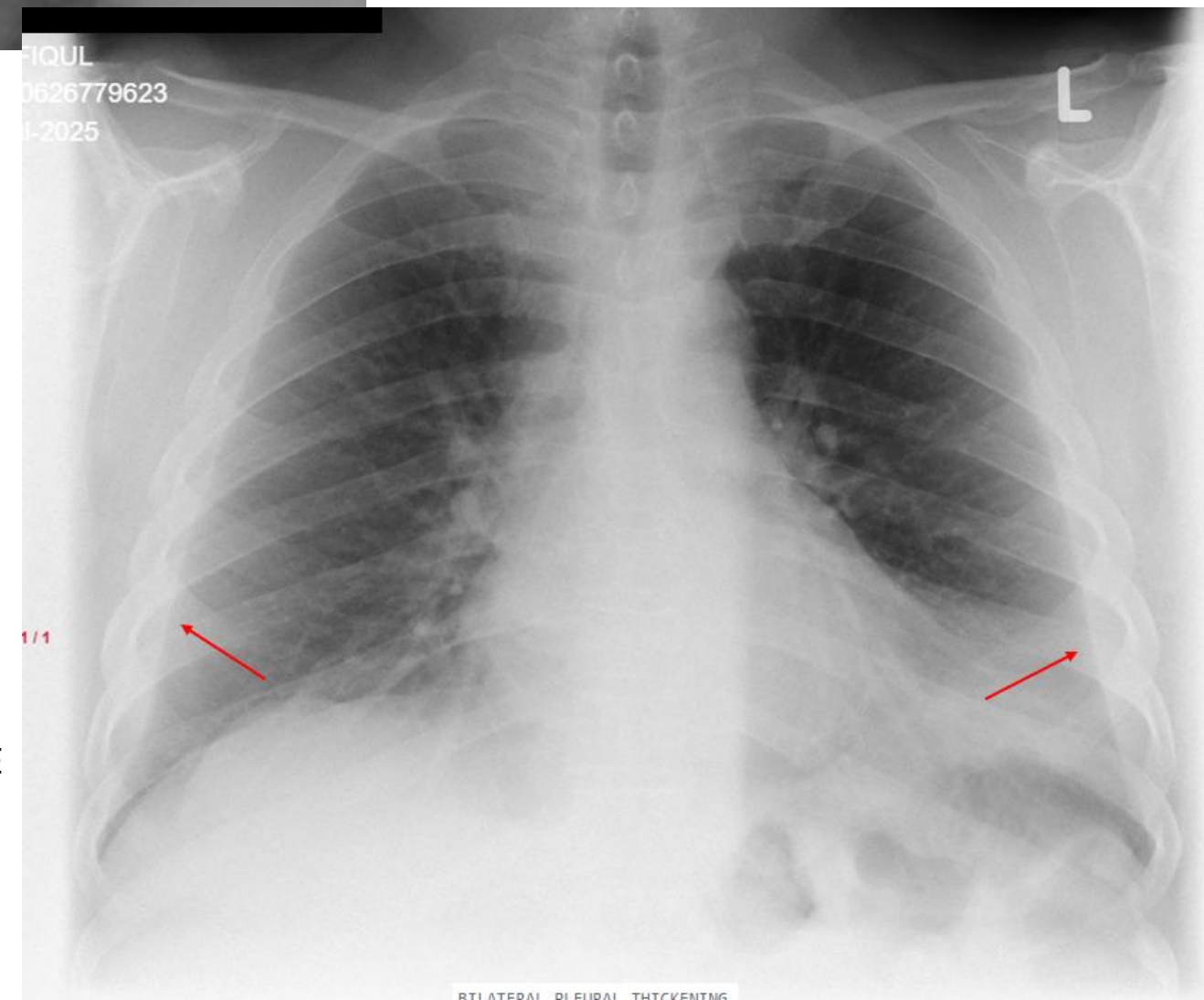


Fig 3.45: Reported as bilateral pleural thickening – UNSUITABLE
These are hypertrophied intercoastal muscles, often seen in muscular men.



Fig 3.46: 1st CXR (A) done in Jan 2025 reported as UNSUITABLE.

Repeat CXR (B) done in July 2025 showed similar findings. These are just apical caps and SUITABLE.

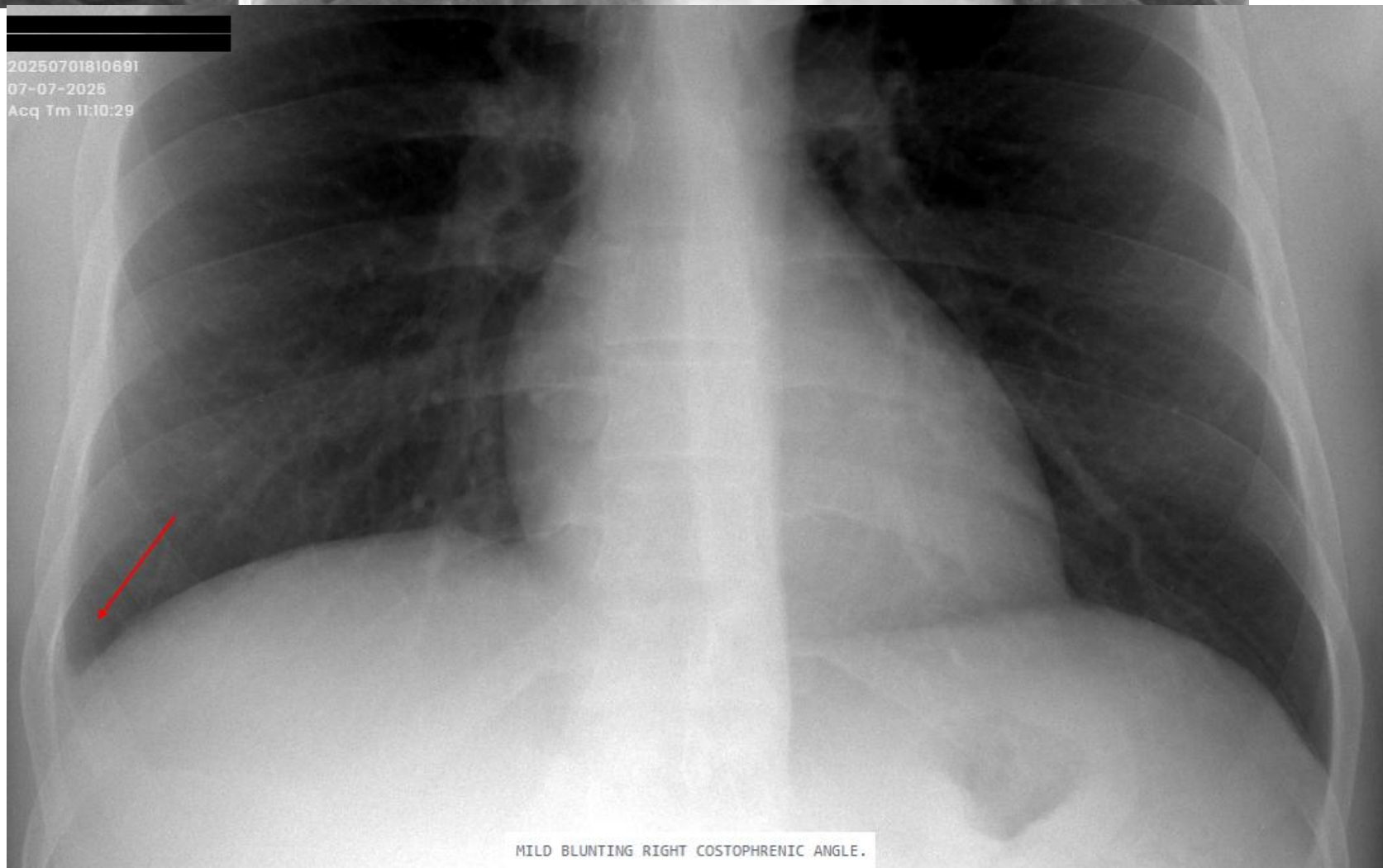
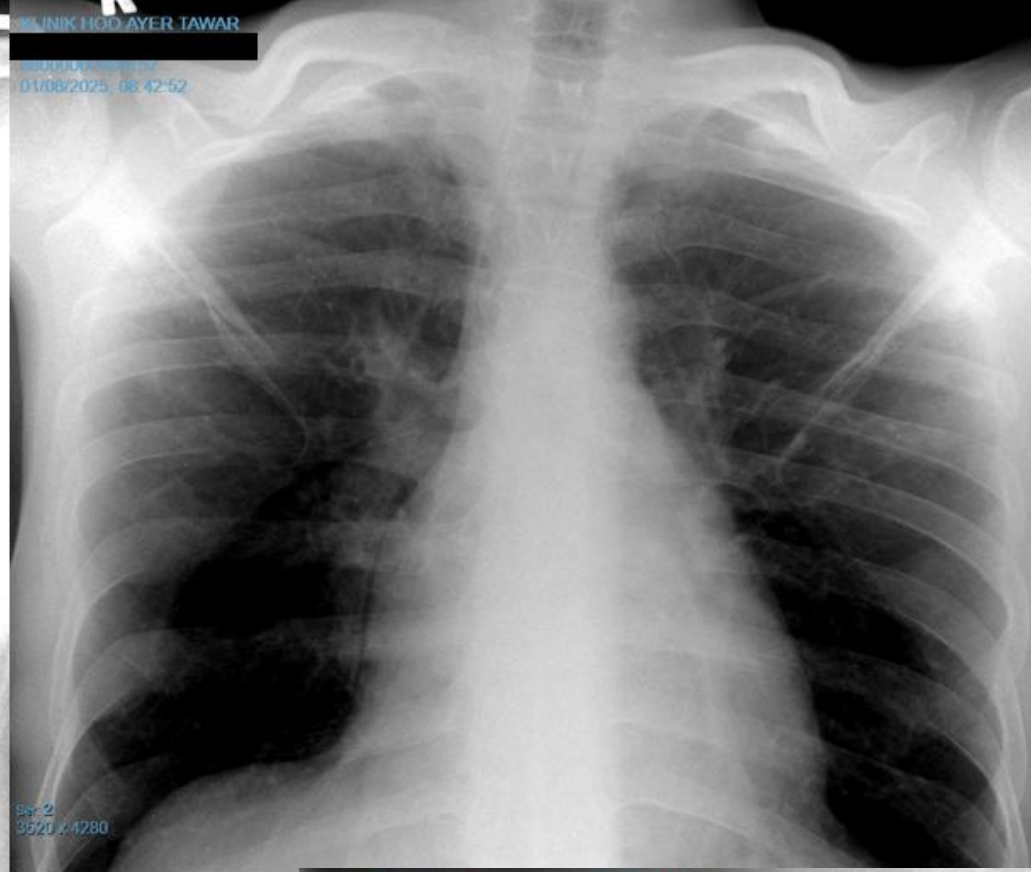
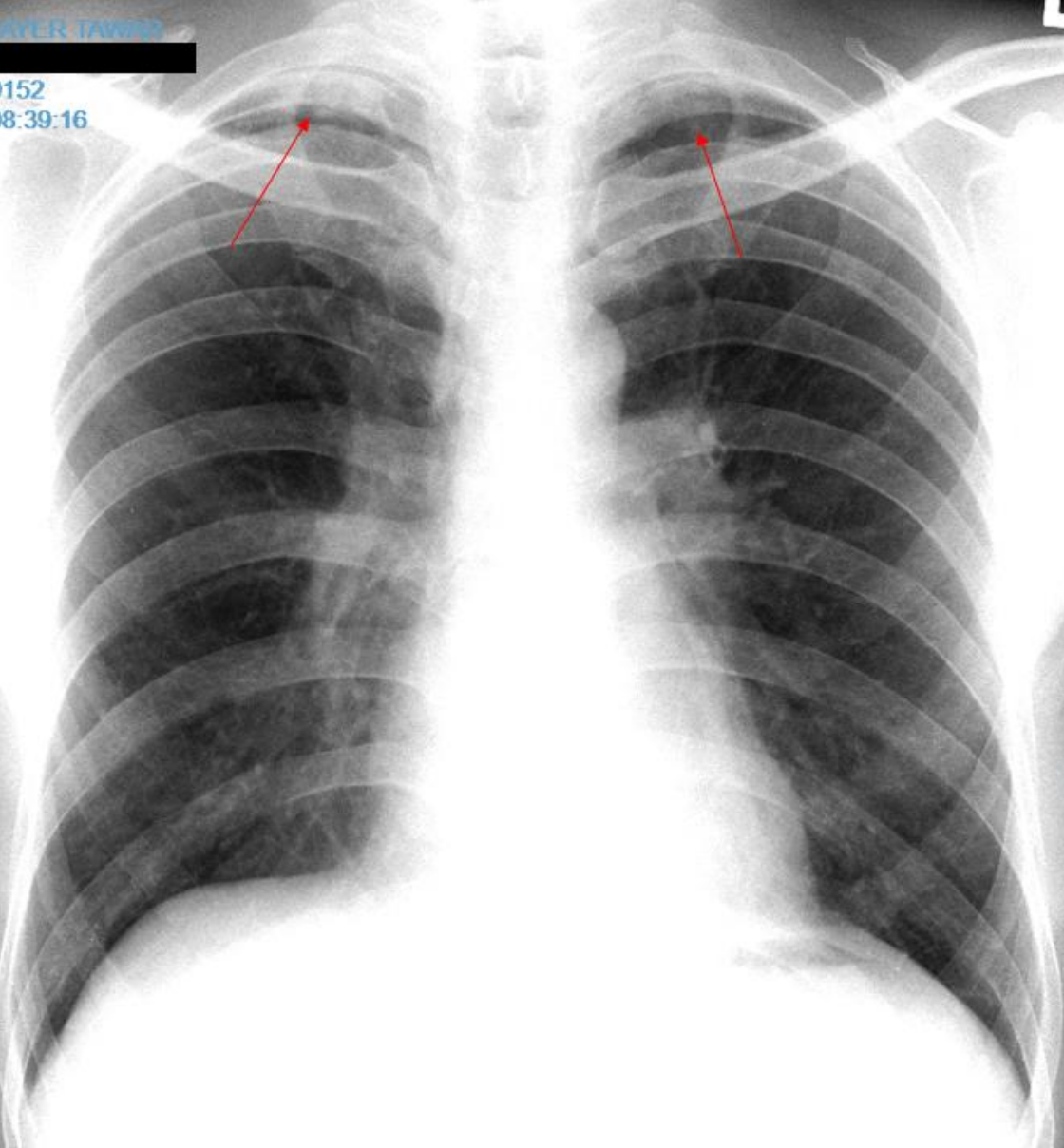


Fig 3.47: Reported as mild blunting right CPA - UNSUITABLE.

I agree it looks blunted but there is no thickening along right lateral chest wall. I will pass this as SUITABLE.



anomalies & pathologies

Fig 3.48: PA view showing suspicious opacities over both apices but apical view is normal. These are pleural caps - SUITABLE.

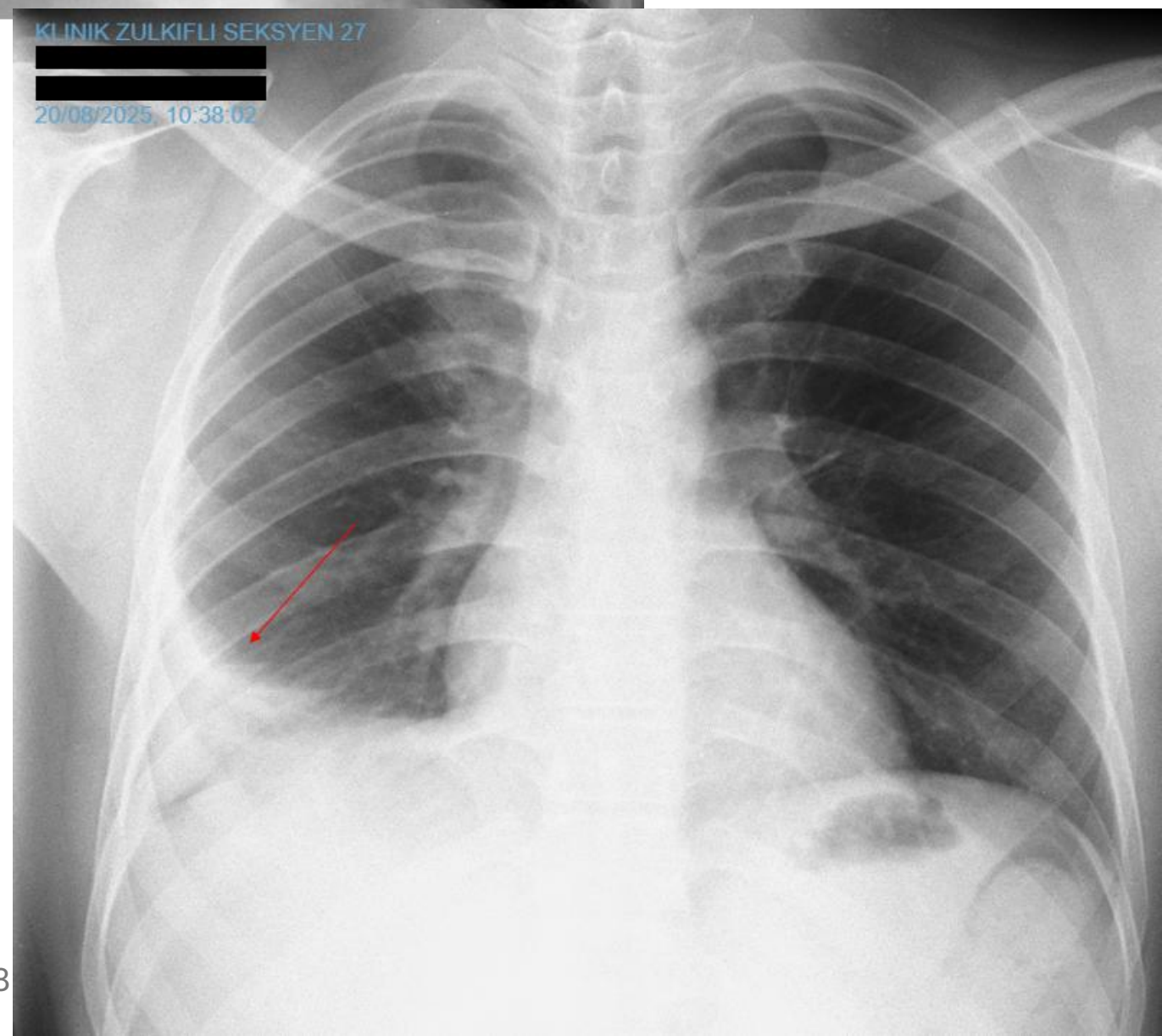


Fig 3.49: Coarse triangular opacity RLZ – pleural fibrosis - UNSUITABLE.

NOTES

About this e-book 'How I report my foreign workers CXR':

They are 12 chapters in the series

1. Pulmonary granuloma
2. Pulmonary fibrosis
3. Pleural anomalies
4. Hilar lymphadenopathy
5. Diaphragm anomalies
6. Rib anomalies
7. Clavicle anomalies
8. Lung anomalies
9. Cardiac anomalies
10. Other anomalies
11. Tuberculosis
12. How to produce a good quality report

Each is published separately as it becomes available

Each is subject to review from time to time

What do we do?

- Teleradiology: online x-ray reporting
- X-ray courses for new license holders (Kursus 40 jam)
- CME for x-ray license renewal
- Film audit report
- QC for x-ray machine (with our affiliated partners)
- Radiographic technique workshops
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Radiology for GPs Series

How I report my foreign workers CXR e-book

No	Topic	Launch date	Link
1	Pulmonary granuloma	1 st July 2025	1 Pulmonary granuloma.pdf
2	Pulmonary fibrosis	1 st Aug 2025	2 Pulmonary fibrosis.pdf
3	Pleural anomalies	1 st Sept 2025	
4	Hilar lymphadenopathy	1 st Oct 2025	
5	Diaphragm anomalies	1 st Nov 2025	
6	Rib anomalies	1 st Dec 2025	
7	Clavicle anomalies	1 st Jan 2026	
8	Lung anomalies	1 st Feb 2026	
9	Cardiac anomalies	1 st March 2026	
10	Others	1 st Apr 2026	
11	Tuberculosis	1 st May 2026	
12	How to write a good report	1 st June 2025	How to produce good quality report.pdf

► NR MINDRAY >>> POCUS WORKSHOP SERIES



mindray

◆ This is a hands-on workshop with minimum participant number per slot to maximize your learning experience.



Klinik Pakar X-ray NR

G05, Blok 1, TTDI Adina,
11, Jalan Judo 13/45,
Seksyen 13,
40100 Shah Alam,
Selangor.



1. To train the GP's in performing quick scans to answer specific question.
2. To enable the GP's to make better clinical decision and instituting appropriate treatment.
3. To assist the GP's to refer to appropriate specialists.

4. To improve clinical outcome by shortening the diagnostic process and reducing the time to definitive treatment.
5. To ensure patient safety is uphold at all times.

Course fee
RM 800
per module

Module: Duration: **3-4 hours**
Number of Doctors: **Minimum 1 doctor,**
Maximum 2 doctors

Doctor to choose the following Module:

- Module A)** Hepatobiliary & Genitourinary system
- Module B)** Antenatal & Female Pelvis
- Module C)** Breast & Thyroid
- Module D)** MSK- Shoulder & knee
- Module E)** Echocardiography
- Module F)** Vascular- Carotid & popliteal vein

(The date is subject to change)

Choose your dates & modules:

Module A SEPT 3, 2025 (Wednesday)	Module B SEPT 4, 2025 (Thursday)	Module E SEPT 6, 2025 (Saturday)
Module C SEPT 11, 2025 (Thursday)	Module F SEPT 20, 2025 (Saturday)	

Registration: Check the slot availability
with Pn. Azie +6012 970 1547

General Inquiries: +6012 244 1547

► NR MINDRAY >>> POCUS WORKSHOP SERIES



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Klinik Pakar X-ray NR

G05, Blok 1, TTDI Adina,
11, Jalan Judo 13/45,
Seksyen 13,
40100 Shah Alam,
Selangor.

Module A: HBS & KUB

- Hands-on session with Live model & Phantom

- Basic knobology and transducer positioning
- Organ identification
(Liver, gallbladder, Common bile duct, Kidneys, Bladder)
- Scanning technique and basic measurements
- Common pathology

Course fee
RM 800
per module



This is a hands-on workshop with minimum participant number per slot to maximize your learning experience.
(Slots are limited)

SEPT 3rd, 2025
Wednesday

9.00a.m - 12.00 p.m /
2.00 p.m - 5.00 p.m

Duration: **3-4 hours**
Number of doctors: Minimum 1 doctor,
maximum 2 doctors

Registration: Check the slot availability
with Pn. Azie +6012 970 1547

General Inquiries: +6012 244 1547



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Klinik Pakar X-ray NR

G05, Blok 1, TTDI Adina,
11, Jalan Judo 13/45,
Seksyen 13,
40100 Shah Alam,
Selangor.

Module B: Antenatal & Female pelvis

- Hands-on session with Live model & Phantom

- Basic knobology and transducer positioning
- Fetal biometric measurements
- Fetal identification (fetal presentation, fetal lie, number of fetuses)
- Placenta localization

- Estimation of amniotic fluid
- Organ identification (uterus, ovaries, adnexa region)
- Scanning technique and basic measurements
- Common pathology

Course fee
RM **800**
per module



This is a hands-on workshop with minimum participant number per slot to maximize your learning experience. (Slots are limited)

SEPT 4th, 2025

Thursday

9.00a.m - 12.00 p.m /
2.00 p.m - 5.00 p.m

Duration: **3-4 hours**

Number of doctors: Minimum 1 doctor,
maximum 2 doctors

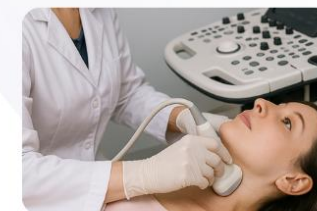
**Registration: Check the slot availability
with Pn. Azie +6012 970 1547**

General Inquiries: +6012 244 1547

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Klinik Pakar X-ray NR

G05, Blok 1, TTDI Adina,
11, Jalan Judo 13/45,
Seksyen 13,
40100 Shah Alam,
Selangor.

Module C: Breast & Thyroid

- Hands-on session with Live model & Phantom

- Basic knobology and transducer positioning
- Organ identification (Thyroid, and cervical lymph nodes, breast tissues)
- Scanning technique and basic measurements
- Common pathology

Course fee
RM **800**
per module



This is a hands-on workshop with minimum participant number per slot to maximize your learning experience. (Slots are limited)

SEPT 11th, 2025

Thursday

9.00a.m - 12.00 p.m /
2.00 p.m - 5.00 p.m

Duration: **3-4 hours**

Number of doctors: Minimum 1 doctor,
maximum 2 doctors

**Registration: Check the slot availability
with Pn. Azie +6012 970 1547**

General Inquiries: +6012 244 1547



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Klinik Pakar X-ray NR

G05, Blok 1, TTDI Adina,
11, Jalan Judo 13/45,
Seksyen 13,
40100 Shah Alam,
Selangor.

Module E: Echocardiography

- Hands-on session with Live model

- Basic knobology and transducer positioning
- Cardiac structure identification
(Chambers, valves, great vessels, pericardium and interventricular septum (IVS))
- Scanning technique and basic measurements
- Common pathology

Course fee
RM **800**
per module



This is a hands-on workshop
with minimum participant
number per slot to maximize
your learning experience.
(Slots are limited)

SEPT 6th, 2025

Saturday

9.00a.m - 12.00 p.m /
2.00 p.m - 5.00 p.m

Duration: **3-4 hours**

Number of Minimum 1 doctor,
doctors: maximum 2 doctors

Registration: Check the slot availability
with Pn. Azie +6012 970 1547

General Inquiries: +6012 244 1547

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Klinik Pakar X-ray NR

G05, Blok 1, TTDI Adina,
11, Jalan Judo 13/45,
Seksyen 13,
40100 Shah Alam,
Selangor.

Module F: Vascular (Carotid & Popliteal vein)

- Hands-on session with Live model

- Basic knobology and transducer positioning
- Anatomical structure identification
(Common carotid artery (CCA), Bifurcation into internal (ICA) & external carotid artery (ECA), Intima-media complex, Popliteal vein & artery, Confluence of anterior & posterior tibial veins, Gastrocnemius veins and valves)
- Scanning technique and basic measurements
- Common pathology

Course fee
RM **800**
per module



This is a hands-on workshop
with minimum participant
number per slot to maximize
your learning experience.
(Slots are limited)

SEPT 20th, 2025

Saturday

9.00a.m - 12.00 p.m /
2.00 p.m - 5.00 p.m

Duration: **3-4 hours**

Number of Minimum 1 doctor,
doctors: maximum 2 doctors

Registration: Check the slot availability
with Pn. Azie +6012 970 1547

General Inquiries: +6012 244 1547



X-RAY COURSE FOR LICENSE RENEWAL (PHYSICAL)



27 SEPTEMBER 2025
09:00 AM - 1.30 PM

Venue : Klinik Pakar X-ray NR,
Seminar Room, 105, TTDI Adina,
Section 13, 40100 Shah Alam,
Selangor



9.00 am - 11.00 am

Cik Azianty Binti Asiar (BKR, MOH)

- Radiation Safety and Radiation Protection Compliance Audit Under Act 304 for Medical Purposes.
- Quality Assurance Program (QAP) Requirements Under Act 304 for Medical Purposes.

11.00 am - 11.30 am

Break

11.30 am - 1.30 pm

Dr. Abdul Rahman Mohamad (Consultant Radiologist, NR Medical Imaging)

- Understanding Ultrasound and MRI for GPs.
- Patient Care & Handling, including Medico-Legal Aspects.



- ☒ DOCTORS
- ☒ RADIOGRAPHERS

APPLICABLE FOR X-RAY
LICENSE RENEWAL

RM300

X-ray Course + Audit Radiograph
(10 images for 1 clinic)

RM250

X-ray Course only

Please contact Pn. Hani for voucher code if you
would like to purchase x-ray course only without
audit radiograph.

To Register:

www.nrmedical4u.com.my

Pn. Hani : +6012 - 203 1547

Office : +603 - 5036 0607



NR Medical Academy



TRAINING COURSE ON X-RAY FOR
GENERAL PRACTITIONERS
(PHYSICAL)

40 HOURS X-RAY COURSE FOR NEW
LICENSE HOLDER

This course is designed for doctors who want to be license
holders for X-ray facilities.

Date:

27 October – 31 October 2025

Venue:

MBSA Convention Centre
Jalan Tinju 13/50, Seksyen 13,
40100 Shah Alam, Selangor.

- Monday to Friday
- Full day course
- MMA CPD Points
will be provided (t&c apply)

Packages includes:

- FREE Film Audit in 2026
(worth RM200)
- 50% discount X-ray CME for
radiographer & doctor in 2026
(worth RM250)
- 50% discount for radiographer &
doctor to attend Radiographic
Technique Workshop in 2025
(worth RM400)



RM2,850 /PAX

To Register:

www.nrmedical4u.com.my

Pn. Hani : +6012 - 203 1547

Office : +603 - 5036 0607

General Inquiries: +6012 - 244 1547

@nrmedicalacademy



NR MINDRAY >>> POCUS WORKSHOP SERIES



mindray

◆ This is a hands-on workshop with minimum participant number per slot to maximize your learning experience.



Klinik Pakar X-ray NR

G05, Blok 1, TTDI Adina,
11, Jalan Judo 13/45,
Seksyen 13,
40100 Shah Alam,
Selangor.



1. To train the GP's in performing quick scans to answer specific question.
2. To enable the GP's to make better clinical decision and instituting appropriate treatment.
3. To assist the GP's to refer to appropriate specialists.

4. To improve clinical outcome by shortening the diagnostic process and reducing the time to definitive treatment.
5. To ensure patient safety is uphold at all times.

Course fee
RM 800
per module

Module: Duration: 3-4 hours
Number of Doctors: Minimum 1 doctor,
Maximum 2 doctors

Doctor to choose the following Module:

- Module A) Hepatobiliary & Genitourinary system
- Module B) Antenatal & Female Pelvis
- Module C) Breast & Thyroid
- Module D) MSK- Shoulder & knee
- Module E) Echocardiography
- Module F) Vascular- Carotid & popliteal vein

(The date is subject to change)

Choose your dates & modules:

Module A
OCT 8, 2025
(Wednesday)

Module B
OCT 9, 2025
(Thursday)

Module C
OCT 16, 2025
(Thursday)

Module D
OCT 11, 2025
(Saturday)

Registration: Check the slot availability
with Pn. Azie +6012 970 1547

General Inquiries: +6012 244 1547

X-RAY COURSE FOR LICENSE RENEWAL (PHYSICAL)



NR MEDICAL IMAGING



25 OCTOBER 2025



09:00 AM - 1.30 PM

Venue : NR Medical Imaging,
Seminar Room, 105, TTDI Adina,
Section 13, 40100 Shah Alam,
Selangor



9.00 am - 11.00 am

Pn. Robiatul Adawiyah Mustakim (BKRP, MOH)

- Requirements of the Atomic Energy Licensing Act 1984 (Act 304) and its Subsidiary Regulations - Radiation Protection Regulation (Licensing) 1986 Radiation Protection Program Requirements Under ACT 304

11.00 am - 11.30 am

Break

11.30 am - 1.30 pm

Dr Arlinder Kaur (Radiologist & Medical Lecturer UiTM)

- Understanding Chest X-rays for GP's
- Understanding Spine, Abdomen & KUB for GP's



✓ DOCTORS

✓ RADIOGRAPHERS

**APPLICABLE FOR X-RAY
LICENSE RENEWAL**

RM300

X-ray Course + Audit Radiograph
(10 images for 1 clinic)

RM250

X-ray Course only

Please contact Pn. Hani for voucher code if you would like to purchase x-ray course only without audit radiograph.

To Register:

www.nrmedical4u.com.my

Pn. Hani : +6012 - 203 1547

Office : +603 - 5036 0607

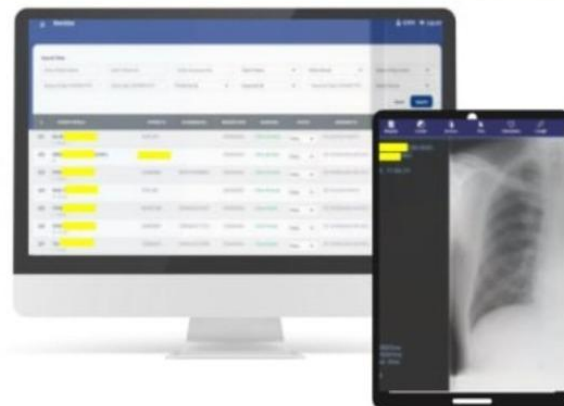




ONLINE REPORTING @ NR MEDICAL

GENERAL PATIENTS
(NON-FOMEMA)

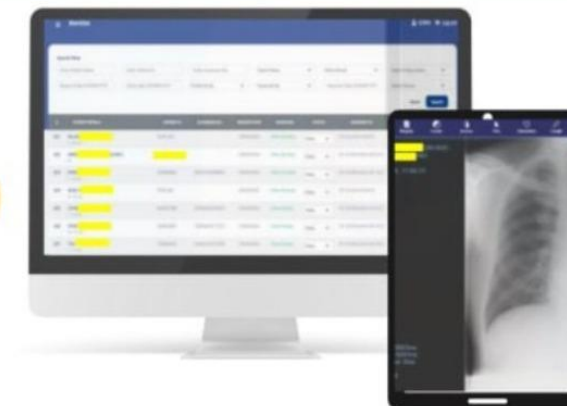
FOMEMA



ONLINE REPORTING @ NR MEDICAL

GENERAL PATIENTS
(NON-FOMEMA)

FOMEMA



FOMEMA X-RAY REPORTING

OUR RADIOLOGISTS:

1. Dr Abdul Rahman Mohamad (NSR 124701)
2. Dr Harith Sherifuddin Ismail (NSR 124596)
3. Dr Zakaria Habib (NSR 134025)

*All our radiologists are members of Fomema Panel Consultant Radiologists (PCR)

WHAT IS YOUR TURNAROUND TIME (TAT)?

All cases will be reported within 24 hours, meaning all cases send today will be reported by the following day.

HOW DO YOU CHARGE?

We charge RM6.25 per case.
 No minimum fee and no other hidden charges.

Our other services:

1. X-ray courses for new license holders (Kursus 40 jam)
2. CME for x-ray license renewal
3. Film audit report
4. QC for x-ray machine (with our affiliated partners)
5. Radiographic technique workshops
6. Ultrasound workshop & lectures

For more information:

NR Medical 603 5036 0607
 Hotline 014 555 6060
 Pn Nor (Manager) 6019 299 5586
 Pn Qila (Business Development) 6012 244 1547
 Dr Rahman 6012 203 1542

HOW DO YOU ASSIGN CASES TO US?

When you open MERTS, on the x-ray page, there is a button ASSIGN TO RADIOLOGIST. Click this button and look for Dr Rahman. Dr Rahman full name is Abdul Rahman Mohamad and Fomema R code is R9EA000009. After that, make Dr Rahman your favourite so that you don't have to search for his name every time.

HOW DO WE OPEN AN ACCOUNT WITH NR?

Just fill in the information on the last page, take a photo and whatsapp to Pn Nor at 6019 299 5586.

HOW DO YOU BILL US?

Please check you bill every month at www.nrmedical.net using your username and password. We do not send paper invoices anymore. Please pay promptly to avoid interruption.

GENERAL PATIENTS X-RAY REPORTING

OUR RADIOLOGISTS:

1. Dr Abdul Rahman Mohamad (NSR 124701)
2. Dr Harith Sherifuddin Ismail (NSR 124596)
3. Prof Dr Hamzaini A Hamid (NSR 135269)
4. Dr Lee Chee Kong (NSR 132343)
5. Dr Norba'aiah Md Noh (NSR 125263)
6. Dr Aslinda Mahat (127468)
7. Dr Jeremiah Sundaraj Peter (NSR 139363)
8. Dr Norlah Khalil (NSR 124608)

*All our radiologists are senior consultants with years of experience in radiology.

WHAT IS YOUR TURNAROUND TIME (TAT)?

All cases will be reported within 12 hours, meaning all cases send today will be reported by the end of the day. In 90% of cases, TAT is within 2 hours.

HOW DO WE OPEN AN ACCOUNT WITH NR?

Just fill in the information on the last page, take a photo and whatsapp to Pn Nor at 6019 299 5586.

WHAT IF I HAVE AN URGENT CASE?

Within the period 9am – 9pm, you may whatsapp our Hotline number. Hotline will alert the radiologists and we will get a radiologist to report ASAP. However, this should be only for clinically urgent cases. This service is not available after 9pm. You are advise to refer to hospital for urgent medical care.

HOW DO WE SEND CASES FOR REPORTING?

First, we need to install our teleradiology system called NRRIS in your clinic. Installation is done via Teamviewer and it takes only minutes. We shall install NRRIS in your x-ray computer. You can choose to install in a separate computer but the 2 computers must be linked. There is no installation fee.

WHAT IS YOUR REPORTING TIME?

9am – 9pm 7 days a week including weekends and public holidays.

HOW DO YOU CHARGE?

For plain x-rays, we charge based on number of views. Each view is charged at RM11.22
 For other imaging modalities – ultrasound, mammo, CT scan & MRI – please ask us for the full price list.

HOW DO YOU BILL US?

Please check you bill every month at www.nrmedical.net using your username and password. We do not send paper invoices anymore. Please pay promptly to avoid interruption.

IS THERE EXTRA CHARGE FOR URGENT CASES?

No extra charges.



INTRODUCING TELECARDIOLOGY ONLINE ECG & ECHO REPORTING



Stay Ahead with Your Health Screening
& Patients' Management!

Introducing Our NEW Online ECG & Echo Reporting Services

WHY CHOOSE OUR SERVICE?



Market Leader

We are already a leader in TeleRadiology & NOW introducing TeleCardiology



Convenient

Get your ECG & Echo reports online within the next working day!



Accurate

Our senior NSR-registered cardiologists ensure high-quality analysis and interpretation.



Secure

Your patients' health information is encrypted and kept confidential.



Accessible

Simply upload your ECG or Echo and receive a thorough report online.

WHAT YOU NEED TO DO?



1) Health screening packages

Incorporate ECG with cardiologist report or Echo with cardiologist report in your health screening packages.



2) Patient's management

Make it your standard protocol to obtain cardiologist reports for all your routine ECGs & Echocardiography.



3) Open account & Installation

Contact us to open an account and installation of NRRIS in your desktop or laptop. Installation is done remotely and is free.

For more information:

NR Medical 603 5036 0607

Hotline 014 555 6060

Pn Nor (Manager) 6019 299 5586

Pn Qila (Business Development) 6012 244 1547

Dr Rahman 6012 203 1542

INTRODUCING TELECARDIOLOGY ONLINE ECG & ECHO REPORTING

ONLINE ECG REPORTING

HOW IT WORKS:



1) Doing your ECG

Do your 12 leads ECG as usual



2) JPG image

If your output is on an A4 ECG paper, use your printer scanner to scan the printout to get a jpg image. You can also use your phone and an appropriate app to get a clear high-resolution photo of your ECG. Keep it in a folder on your laptop/desktop. Certain machine has a build-in SD card. Copy the tracing in jpg format.



3) Upload Your ECG

Upload your ECG image onto our secure platform.



4) Expert Review

Our team of experienced cardiologists will review your ECG.



5) Receive Your Report

Access your detailed report with clear explanations and recommendations by the next working day!

ONLINE ECHO REPORTING

HOW IT WORKS:



1) Doing your Echo

Echo should be performed by a qualified and trained Cardiovascular Sonographer or Technician.



2) Dicom image

The output from your ultrasound machine should be a set of Dicom images. Extract these Dicom images on a thumb drive.



3) Draft report

Your sonographer or CVT will prepare a draft report for each patient



4) Upload Your Echo

Upload your Echo images (cine and still) from the thumb drive and draft report onto our secure platform.



5) Expert Review

Our team of experienced cardiologists will review your Echo.



6) Receive Your Report

Access your detailed report with clear explanations and recommendations by the next working day!

WHO CAN BENEFIT?

- Clinics or medical centres offering health screening packages
- Doctors monitoring patients with cardiovascular conditions
- Doctors needing faster and accurate ECG or echo analysis for their patients
- Compliance to insurance requirement
- Clarifying ambiguous report by ECG machine
- Doctors' own personal development in ECG & Echo knowledge
- Doctors who would like to reduce their medico-legal risk

WHO WE CANNOT HELP?

Doctors consulting patients with chest pain and require urgent report – better to refer to hospital immediately!

HOW MUCH DOES IT COST?

Installation is FREE

ECG report fee is RM49.00 only

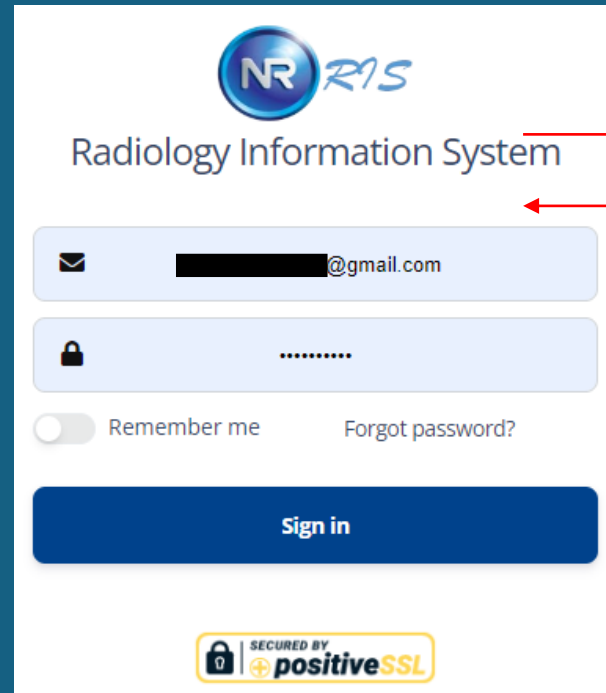
Echo report fee is RM77.54 only

Upgrade your health screening packages and patients' management today
—try our online ECG and Echo reporting services!

NR RIS Cloud PACS

New function: Now we can link clinics without x-ray to your clinic with x-ray.

Enhance your x-ray service to neighbouring clinics.



The login interface for the NR RIS Radiology Information System. It features the NR RIS logo at the top, followed by the text 'Radiology Information System'. Below this is a login form with fields for email (ending in @gmail.com) and password (masked with dots). There are links for 'Remember me' and 'Forgot password?'. A blue 'Sign in' button is at the bottom. A security badge at the bottom indicates 'SECURED BY positiveSSL'.



Patient consulting a doctor and this clinic has **NO** x-ray

Patient referred to clinic with x-ray



X-ray done. Images transmitted to NRRIS for reporting.



Both referring doctor and x-ray centre can view report and image thru NRRIS.




IMPORTANT REMINDER

The Malaysian Medical Council (MMC) has recently rejected appeal applications because of non-fulfillment of the CPD point requirement which is mandatory for renewal of Annual Practising Certificate (APC).

Visit our website for related content and updates

- ✓ Quality Standards for formal Continuing Professional Development (CPD) Activities
- ✓ Continuing Professional Development (CPD) Guidelines
- ✓ Frequently Asked Questions (FAQs) On Continuing Professional Development (CPD)

“SECURE YOUR FUTURE : EARN CPD POINTS NOW !”

FOR FURTHER INQUIRIES, CONTACT US :  Unit APC : 019-802 2171 / 019-383 2171  unitapc@mmc.gov.my    

All CME activities @NR (except workshops) carry CPD points for doctors & radiographers.

EARN YOUR CPD POINTS THRU US!