



***Egyptian Foundation for
Interventional Pain Practice***

المؤسسة المصرية للعلاج التداخلي للألم

المشهرة تحت رقم 767 لسنة 2016 بوزارة التضامن الاجتماعى

Magdi Ramzi Iskander MD, FFARCS, FIPP

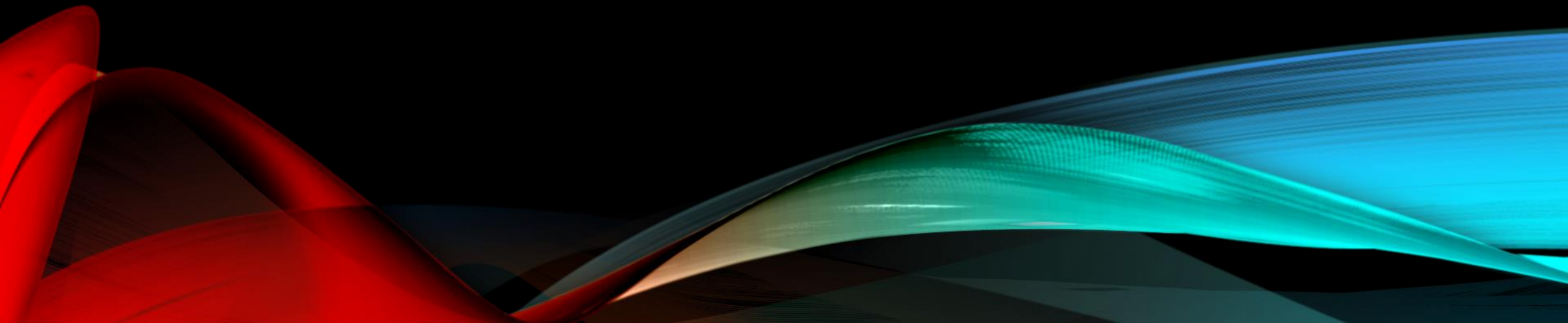
Prof of Anaesthesia & Pain Relief National Cancer Institute Cairo University

Chairman of Sections (previous) & Chairman of Middle East Section of WIP

President of Egyptian Sector of World Society of Pain Clinicians

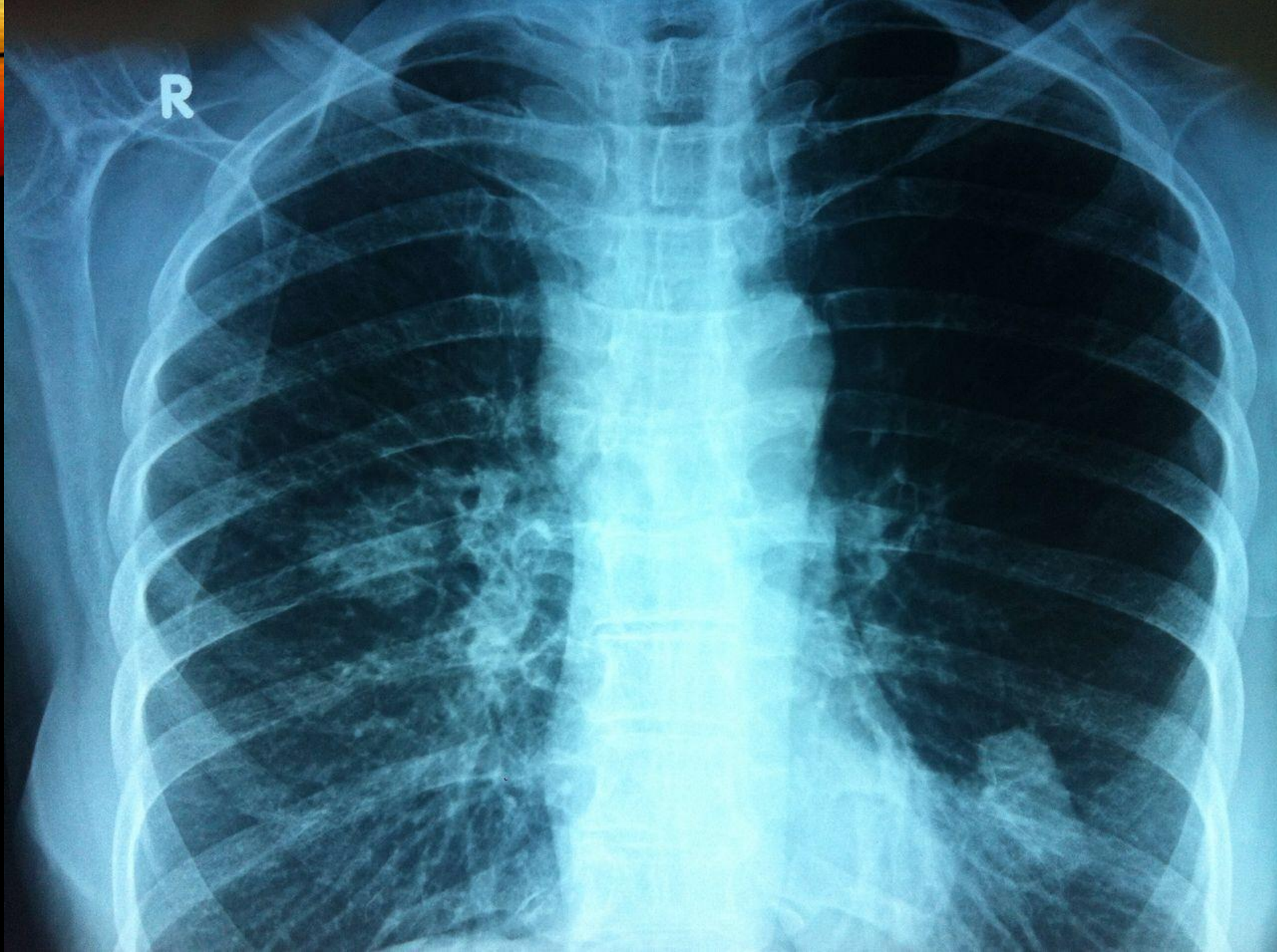
President of the Egyptian Foundation for Interventional Pain Practice (EFIPP)

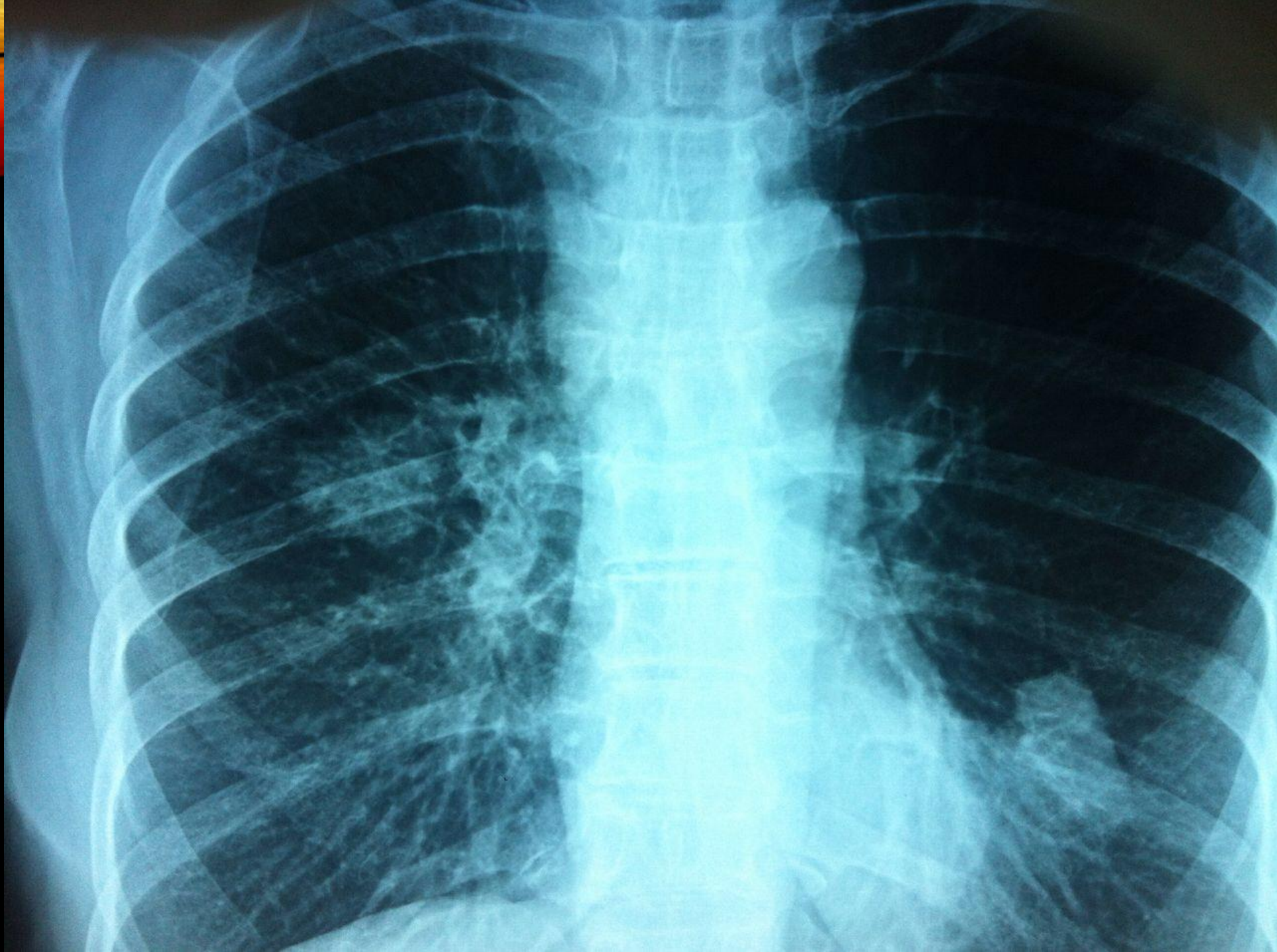
LUNG CANCER PRESENTATIONS



CASE 1

Lady aged 62 regular smoker is suffering from weakness in standing & inability to climb stairs .

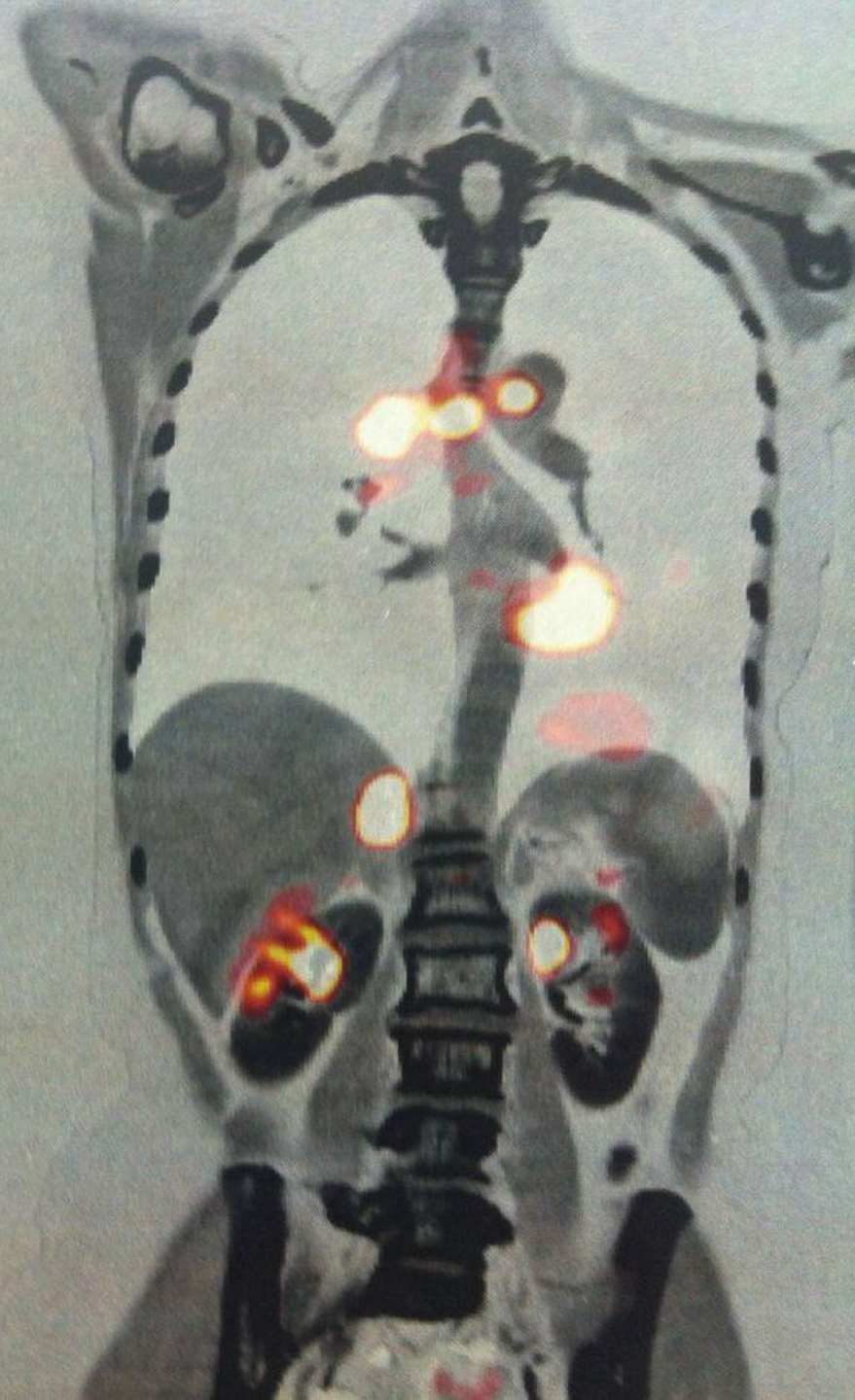


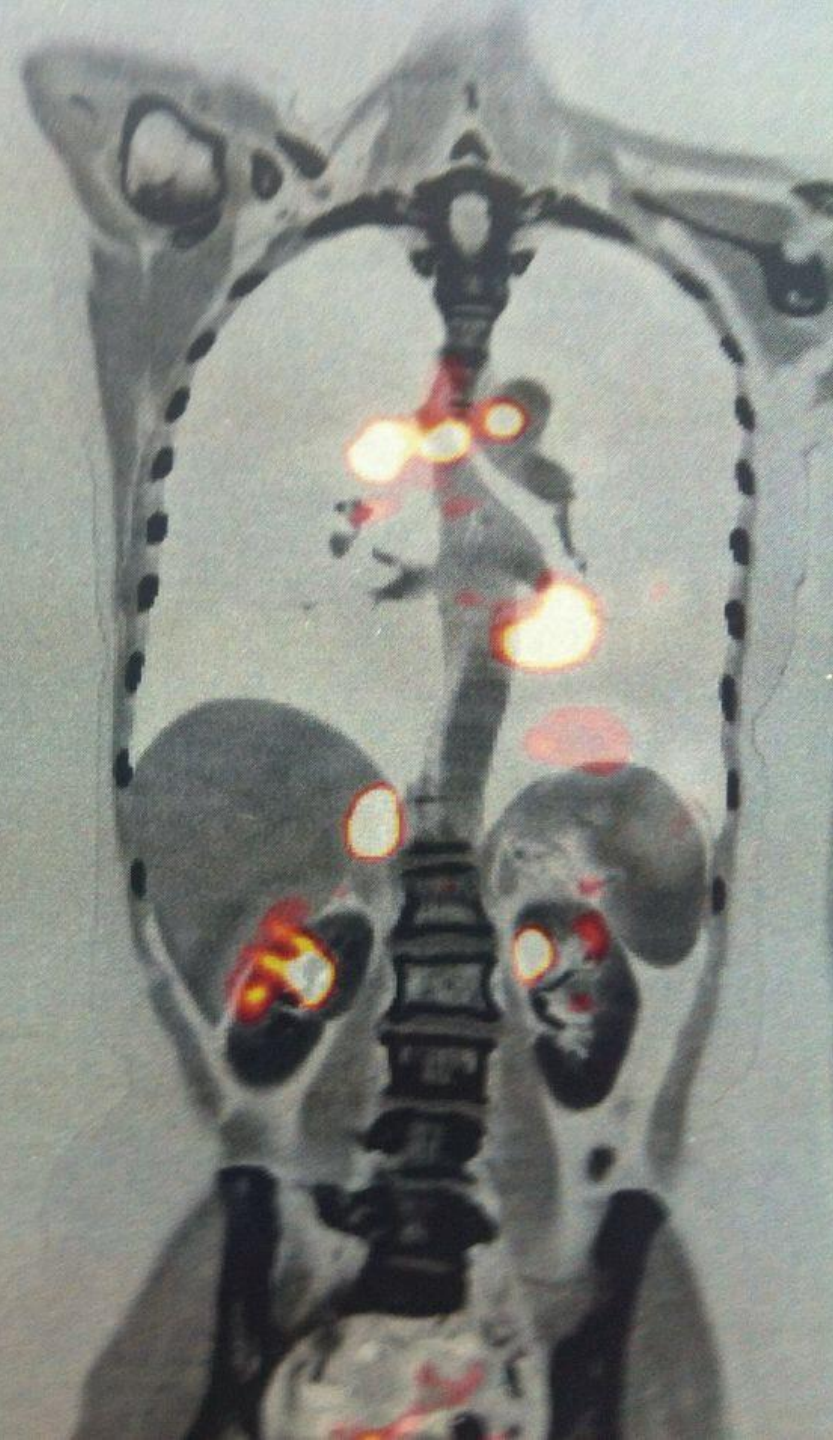
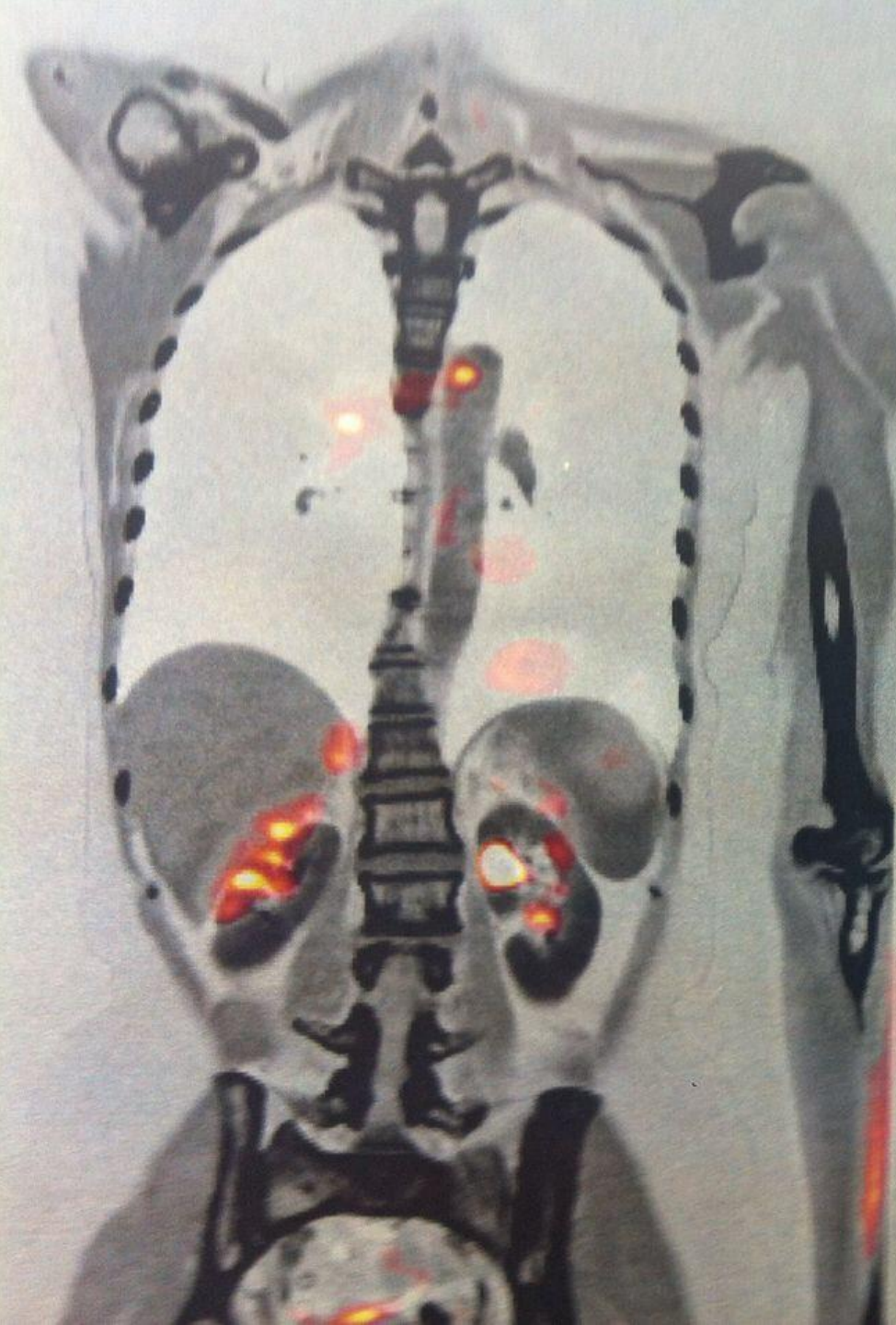












-49

0 mm

Philips Brilliance 64
120kV, 167mAs
FOV 350.0 mm
SW 5.10 mm
Z 1.47



10 cm



120kV, 147mm
SC 350.0
BW 5.10
I 1.

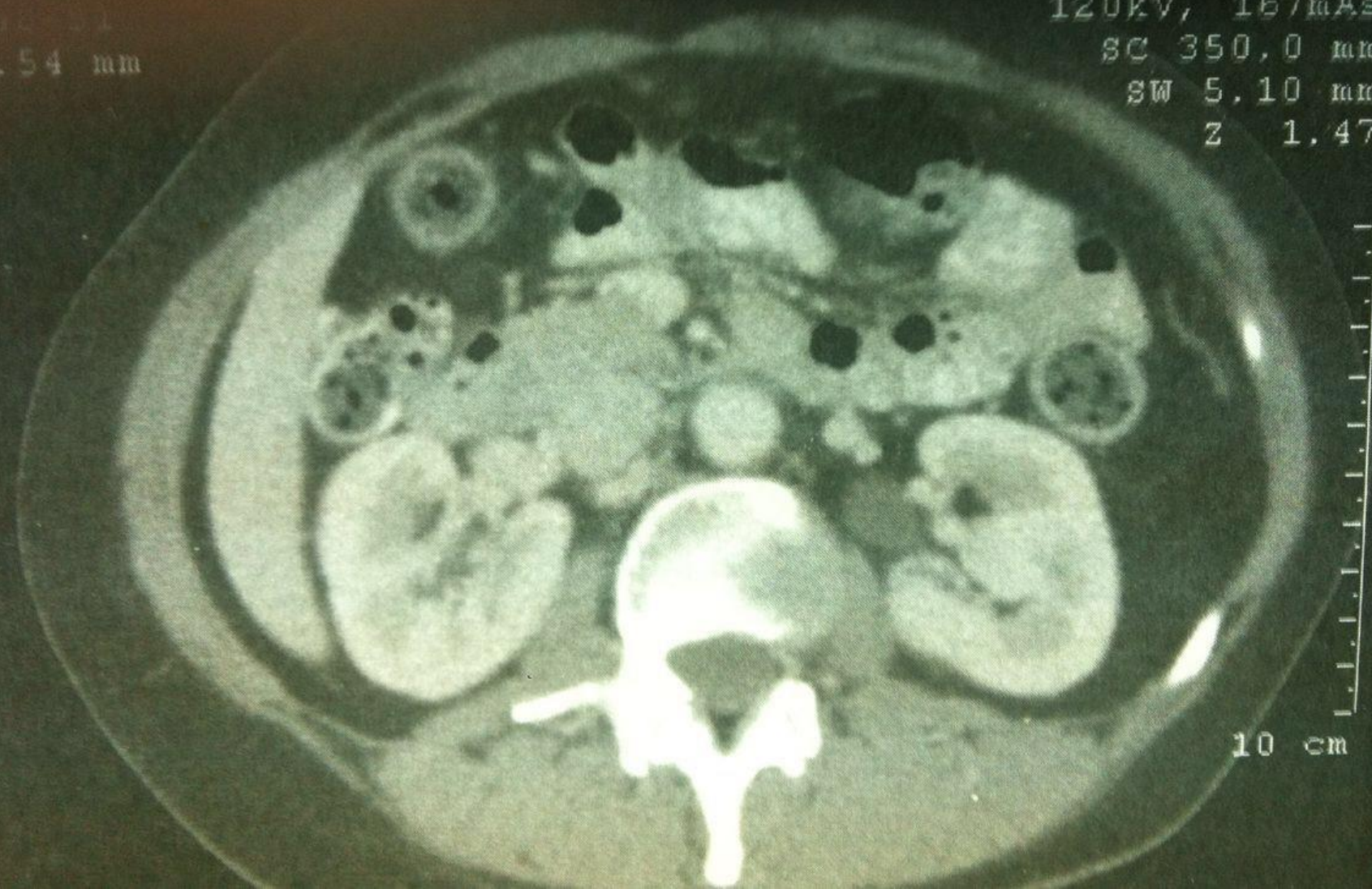
308.54 mm

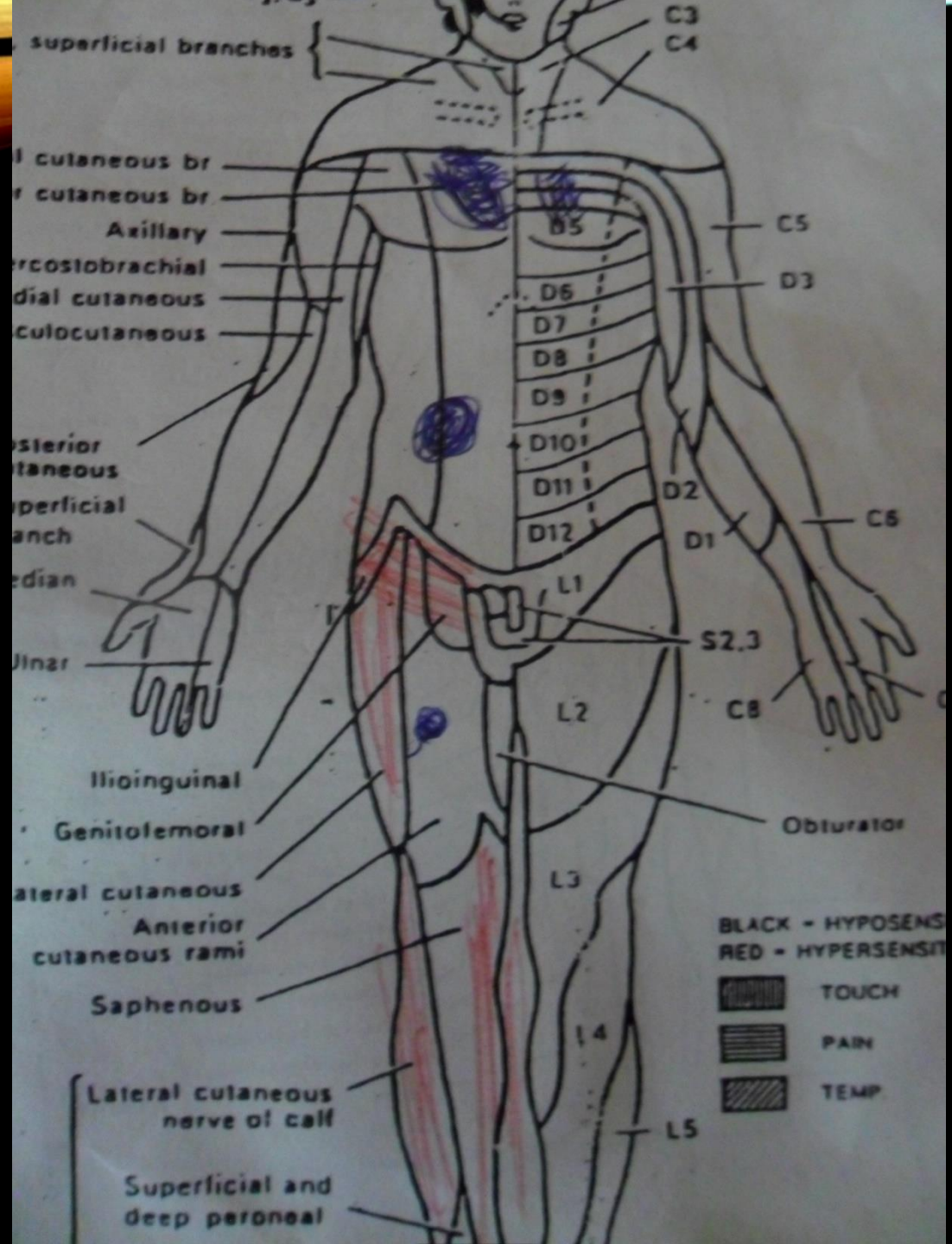
120kV, 167mAs 80
SC 350.0 mm 31
SW 5.10 mm
Z 1.47

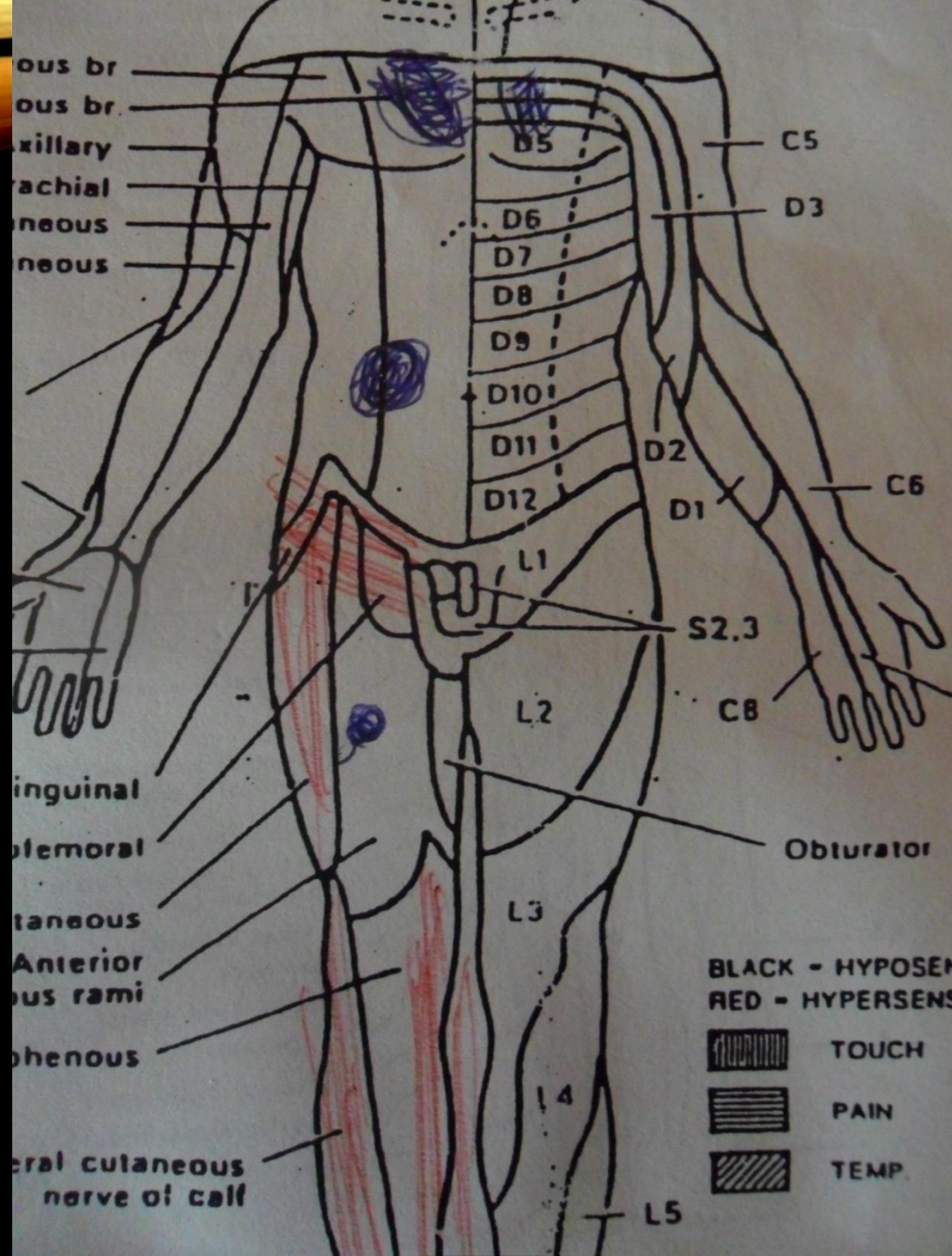
R

R

10 cm







DERMATOMAL COMPLAINT

- Groin Pain : L1
- Lateral Cutaneous Nerve Of The Thigh.
- Obturator & L5 (+ve Passive SLR)
- Sympathetic Leg Pain .
- Rt Piriformis & Rt Psoas (+ve Active SLR)
- Bony Pain (Femur)?

NO ONCOLOGICAL TREATMENT BUT PAIN MANAGEMENT

- Long Acting Tramadol (100mg twice daily)
+ Lactulose syrup twice daily .
- Pregabalin 75 mg twice daily
- Duloxetine 30 mg .

TWO WEEKS LATER

- Bilateral Suprascapular Pain Rt more than Lt .
- Pain same sites more intense .
- Uninterrupted coughing.
- Can't move in bed at night .

ADJUSTED THERAPY

- Lidocaine Patch 5% (Suprascapular & Loin) Rt side once daily
- Levofloxacin Tablets 500mg daily .
- Codeine Syrup (SINCOD)
- Fentanyl Patch 100 microgram/hr
- Long Acting Tramal T 200mg twice daily
- Picolax drops
- Duloxetine 60mg +/- calmipam

INTERVENTIONAL THERAPY

- Unacceptable bilateral neurolytic interventions (always one sided).
- Unjustified discrete RF/neurolytic to an unexplainable effect of a tumour on a nerve .
- Neurolytic Lumbar sympathetic .
- Ventral right Sacral Epidural .

CASE 2

Lady aged 84 is suffering from pain covering left breast .

Pain is shooting from upper back towards the left nipple .

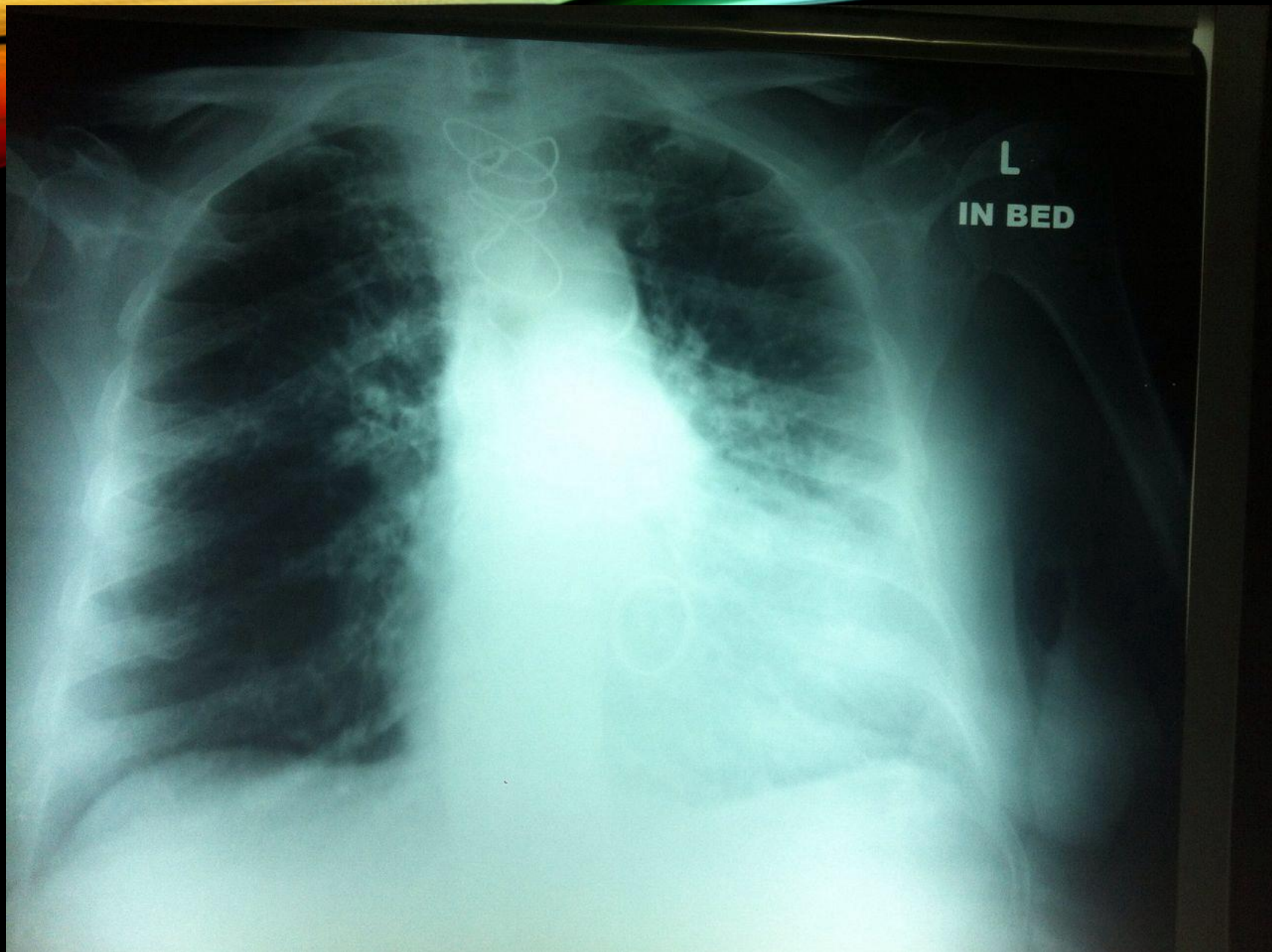
Dyspnea on mild exertion was noticed.

Past History :Rheumatic Mitral Stenosis

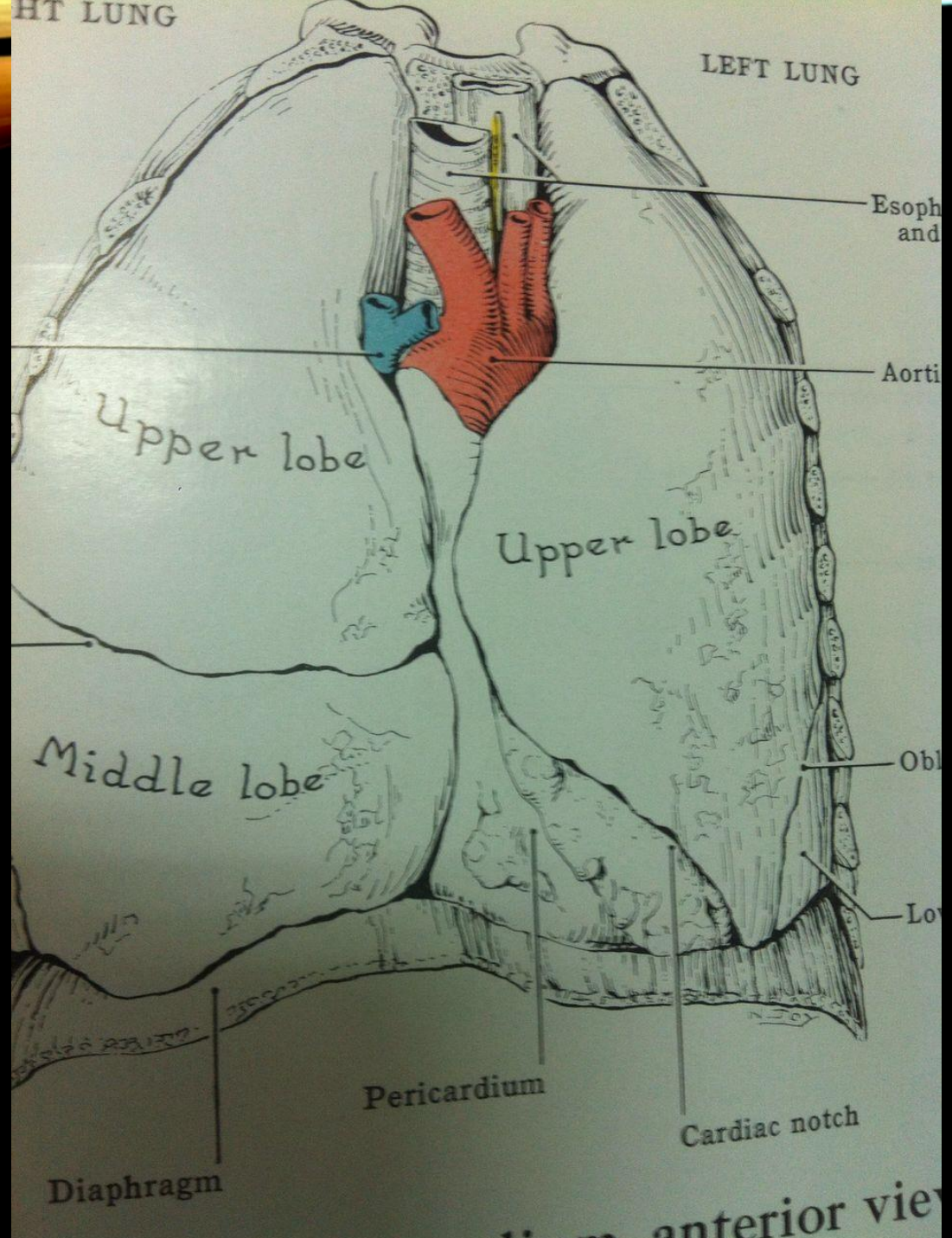
- Closed Valvotomy 1994

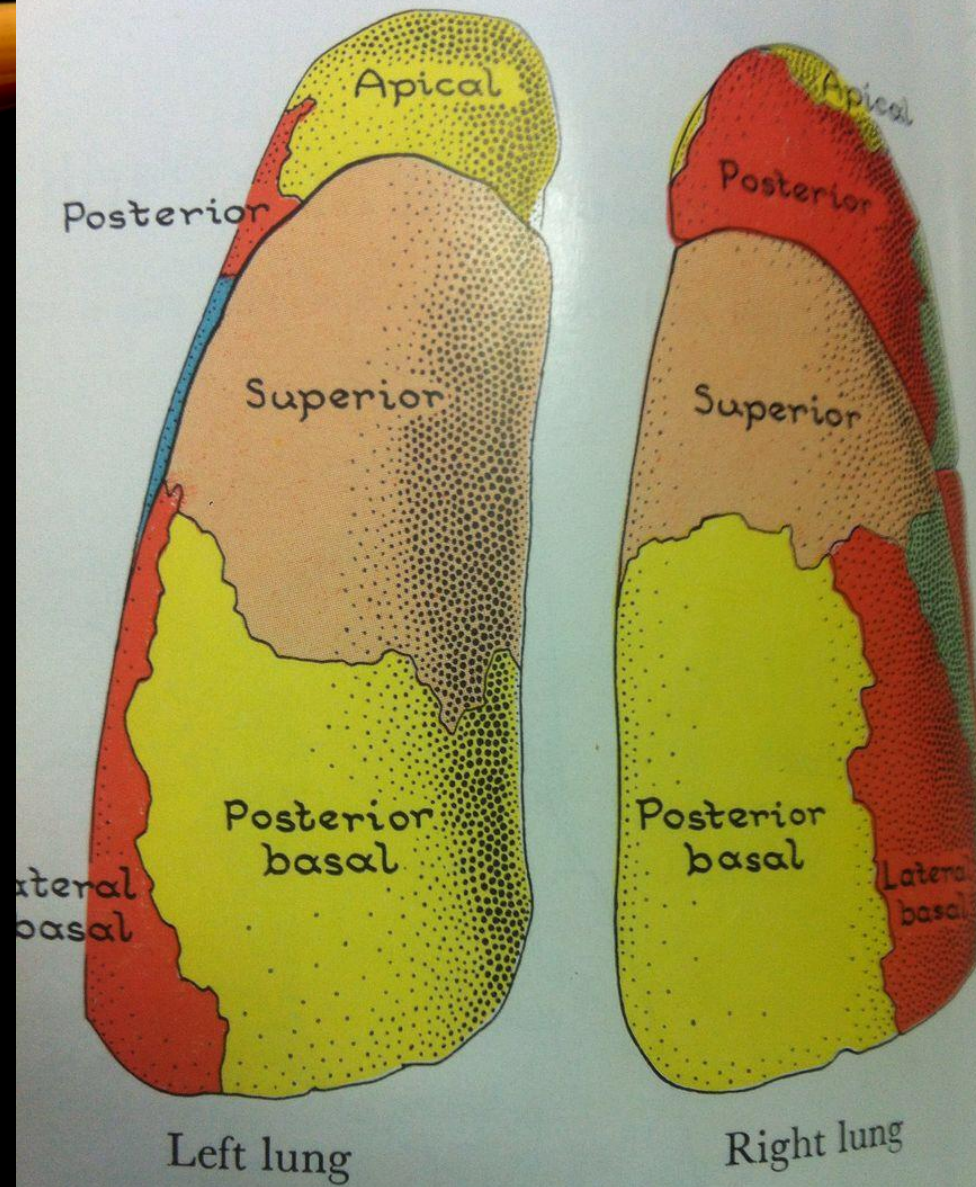
- Valve Replacement 2014

Drug History : Warfarin to keep INR above 3.5









Left lung

Right lung

POSTERIOR VIEW



Actinon 10
CCU

Actinon 10
CCU

Actinon 10
CCU

16 28 10mm
50 +0 00

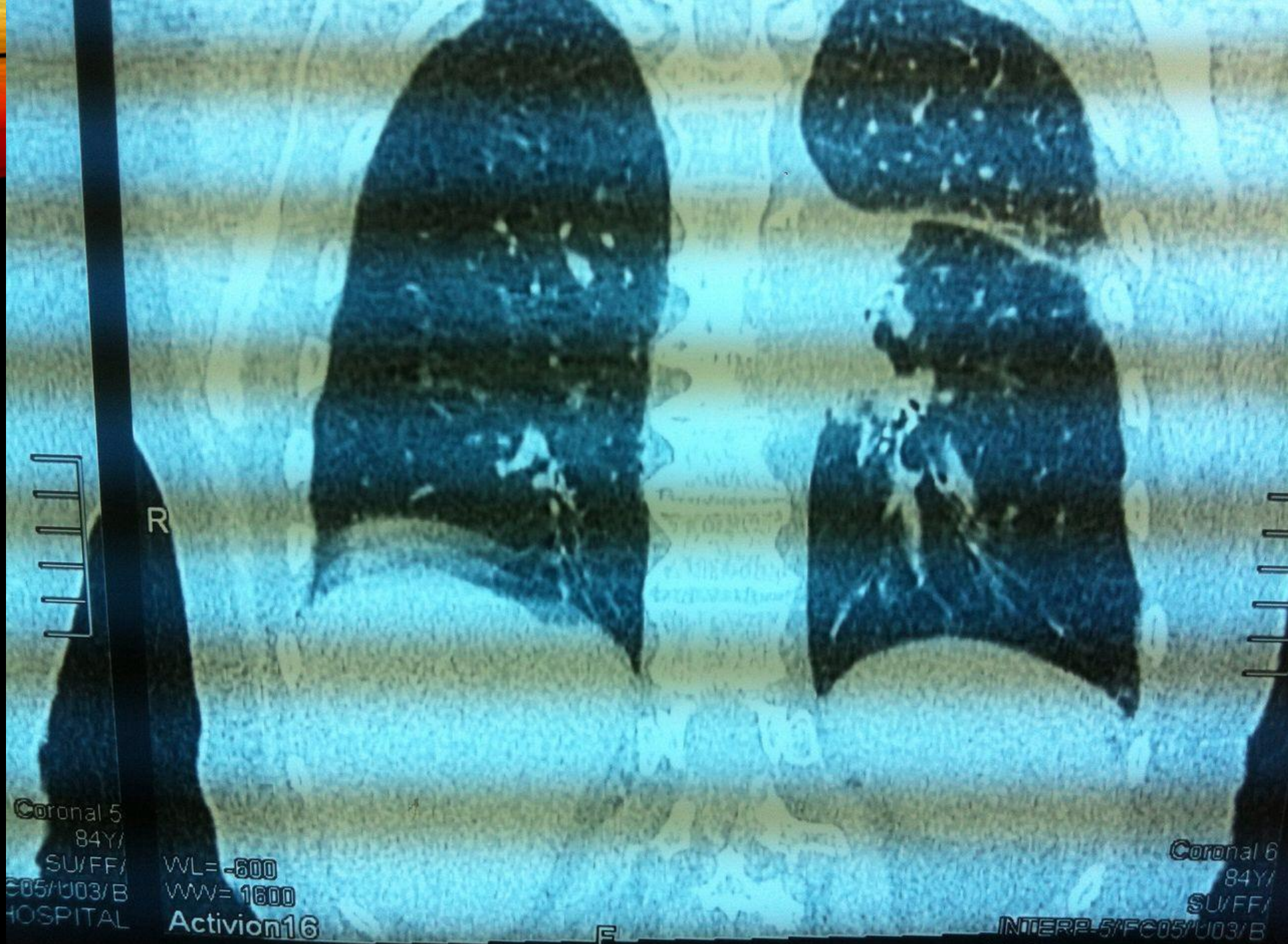
HF150



Acti 11
RAY
EL/FE/
06/06/06
AL-SALAM HOSPITAL
WLE 23
WWE 887
Acti 16

P

Acti 12
RAY
EL/FE/
06/06/06
AL-SALAM HOSPITAL
WLE
WWE
Acti



R

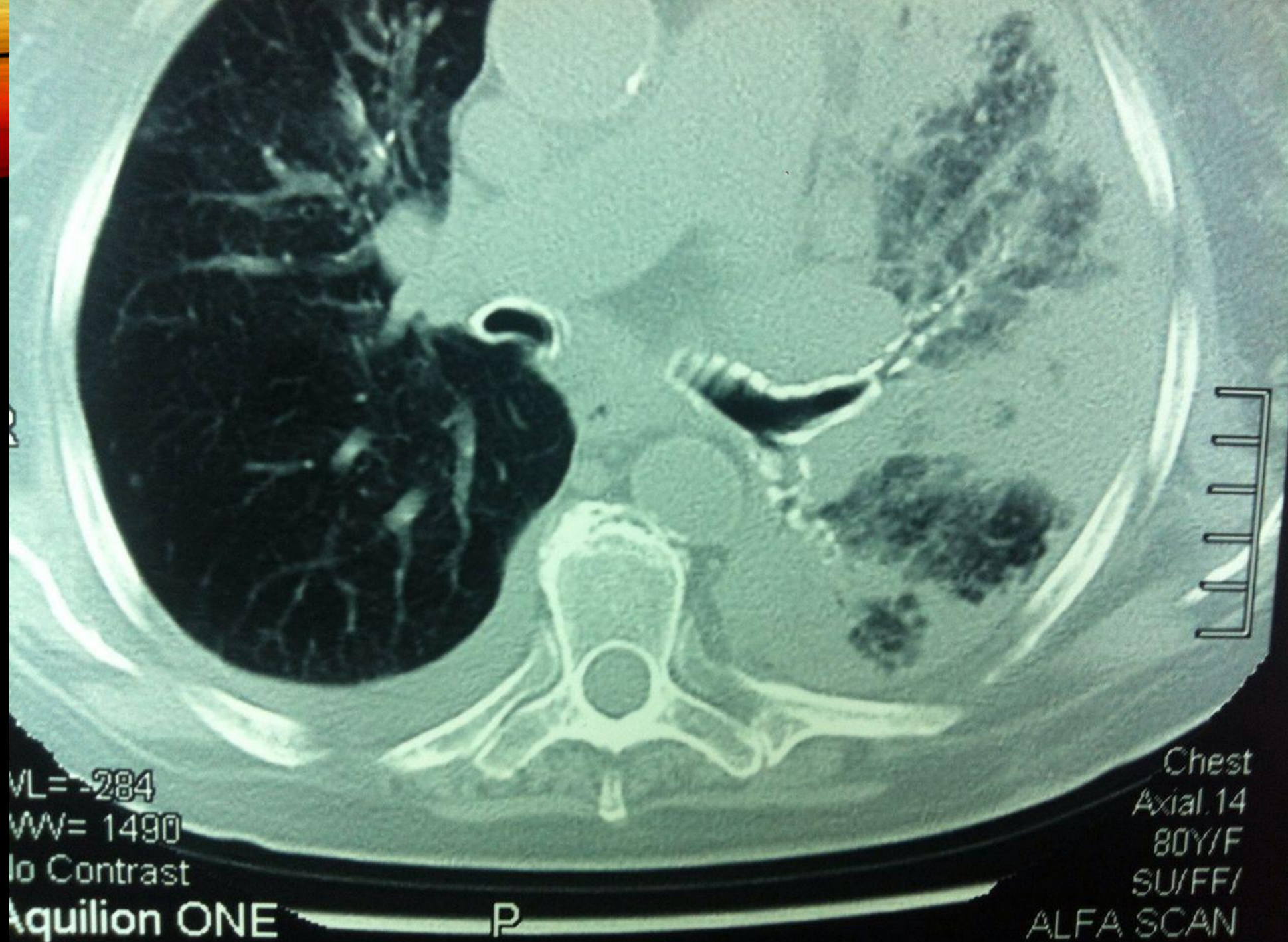
Coronal 5
84Y/
SU/FF/
C05/U03/B
HOSPITAL

WL=-800
WW=1800
Activion16

F

Coronal 6
84Y/
SU/FF/
C05/U03/B

INTERP-5/FC05/U03/B
AL-SALAM HOSPITAL

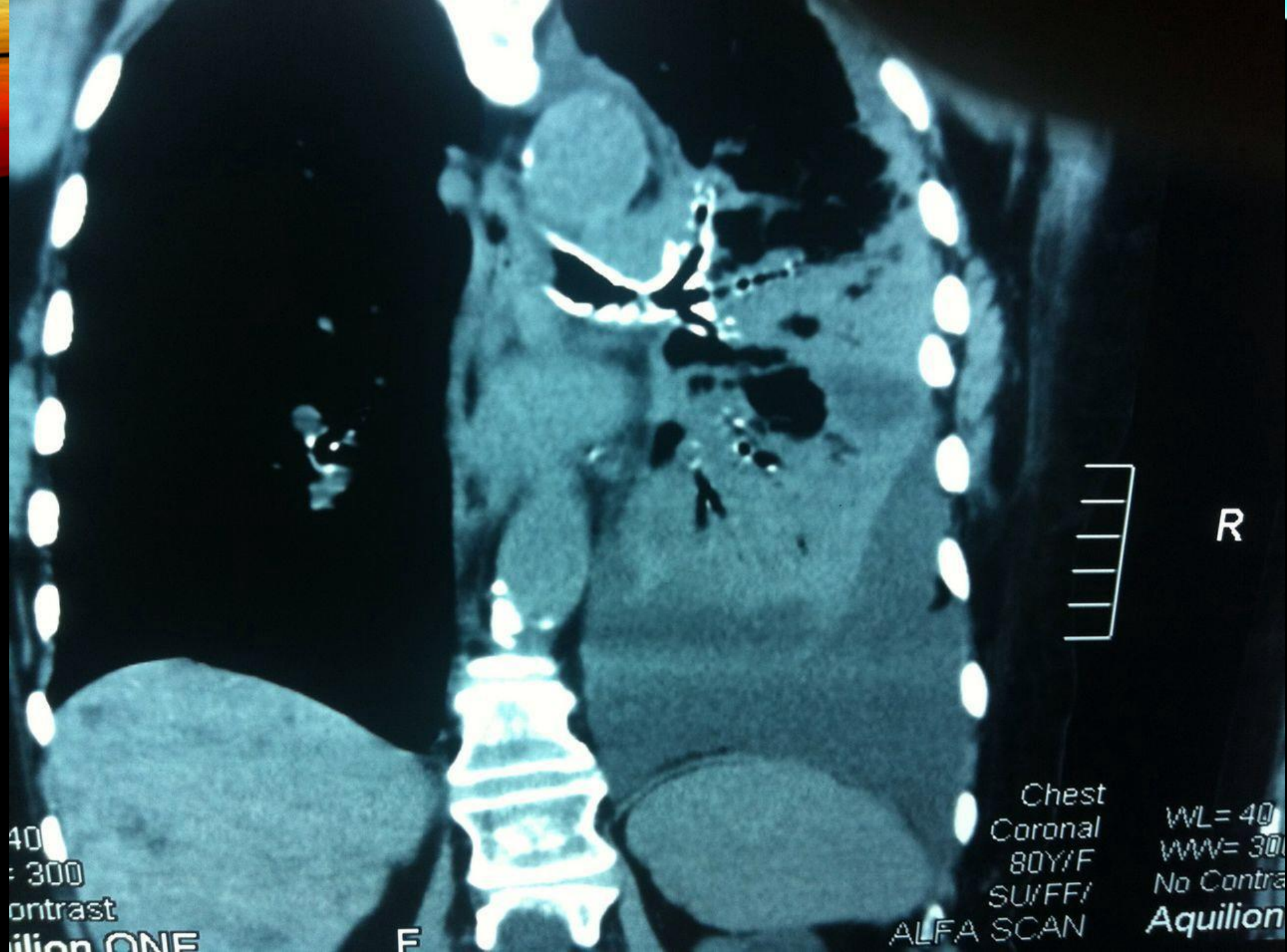


VL=-284
WW= 1490
No Contrast

Aquilion ONE

P

Chest
Axial.14
80Y/F
SU/FF/
ALFA SCAN

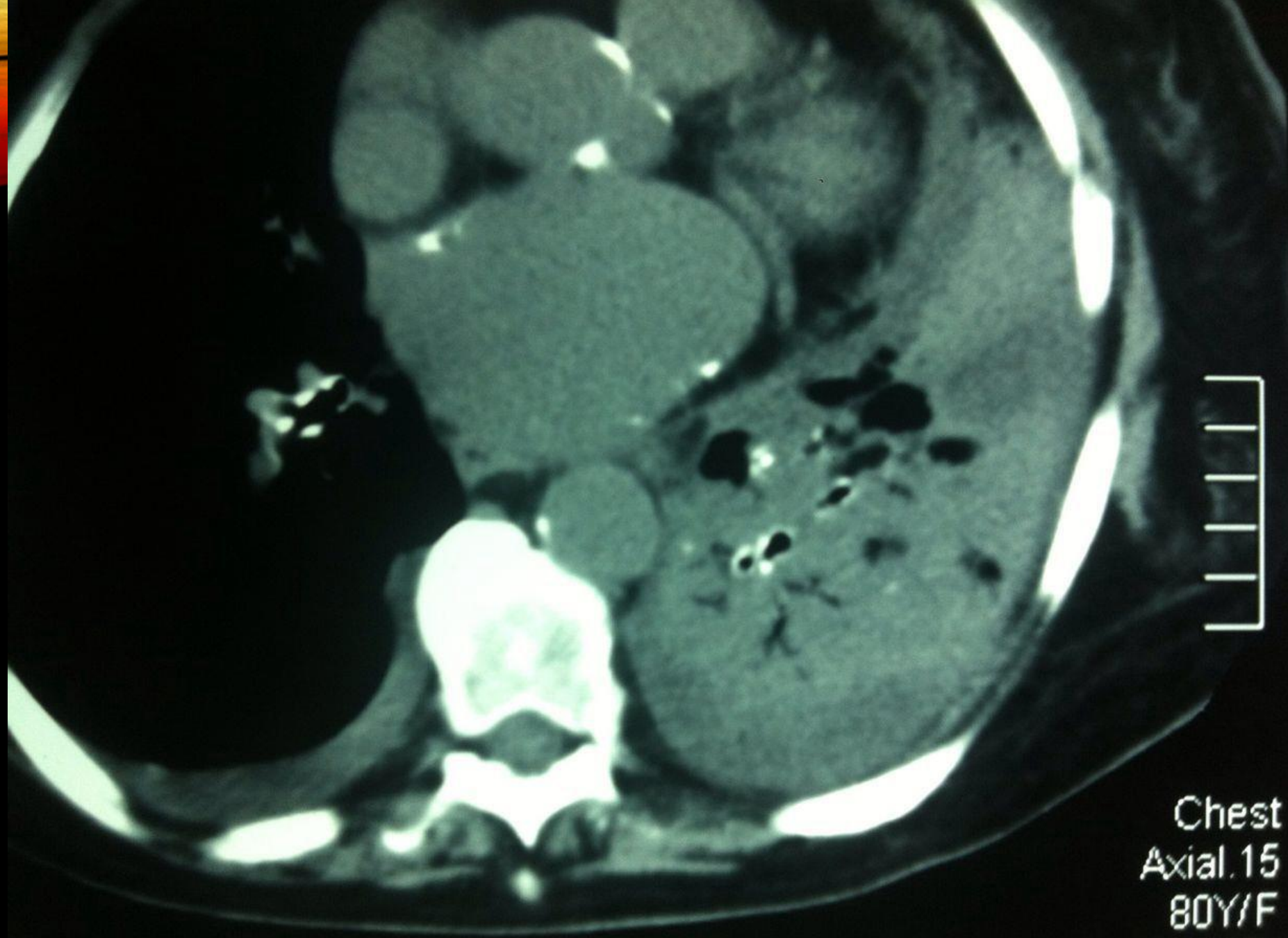


40
300
contrast
Aquilion ONE

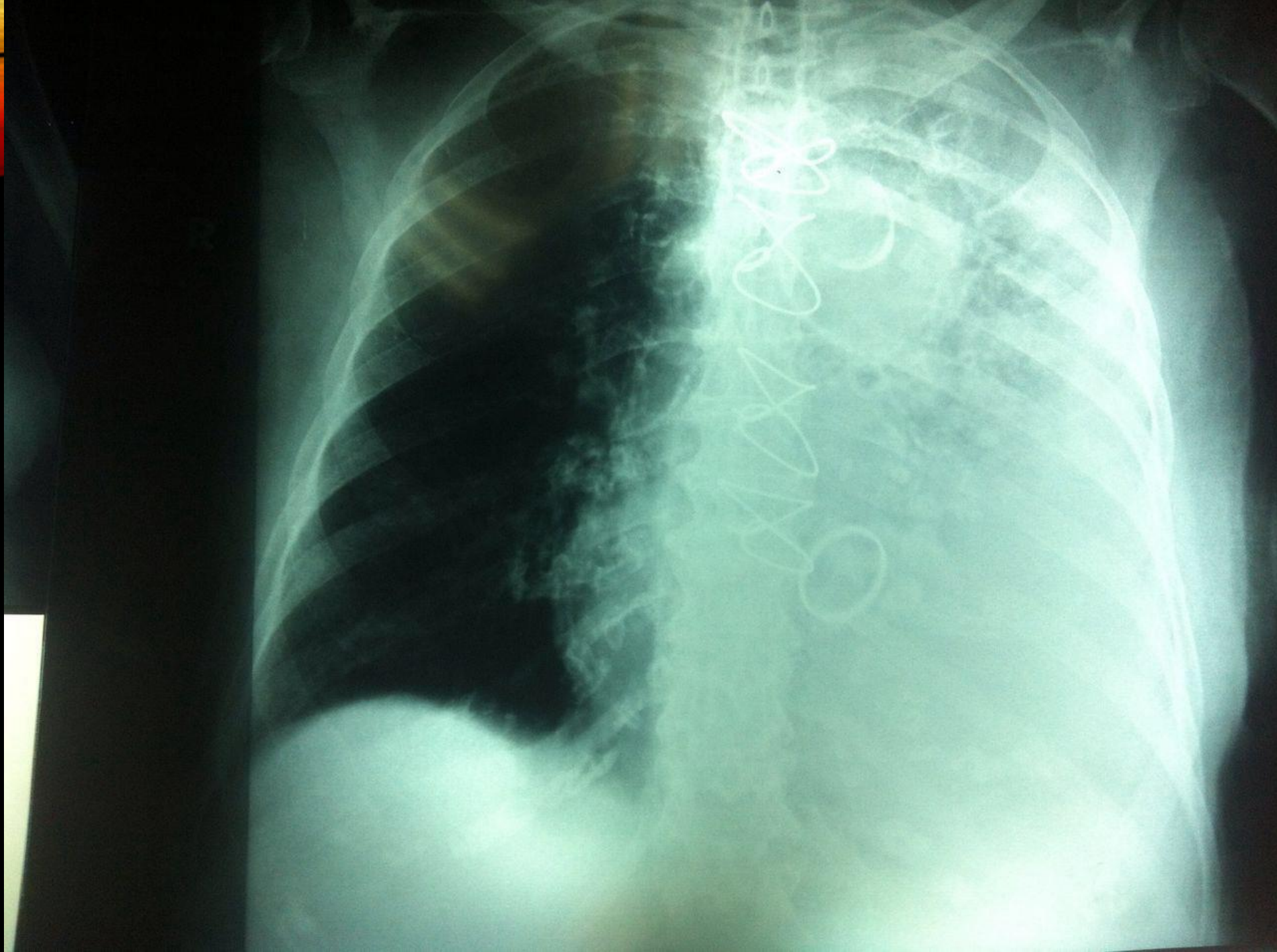
F

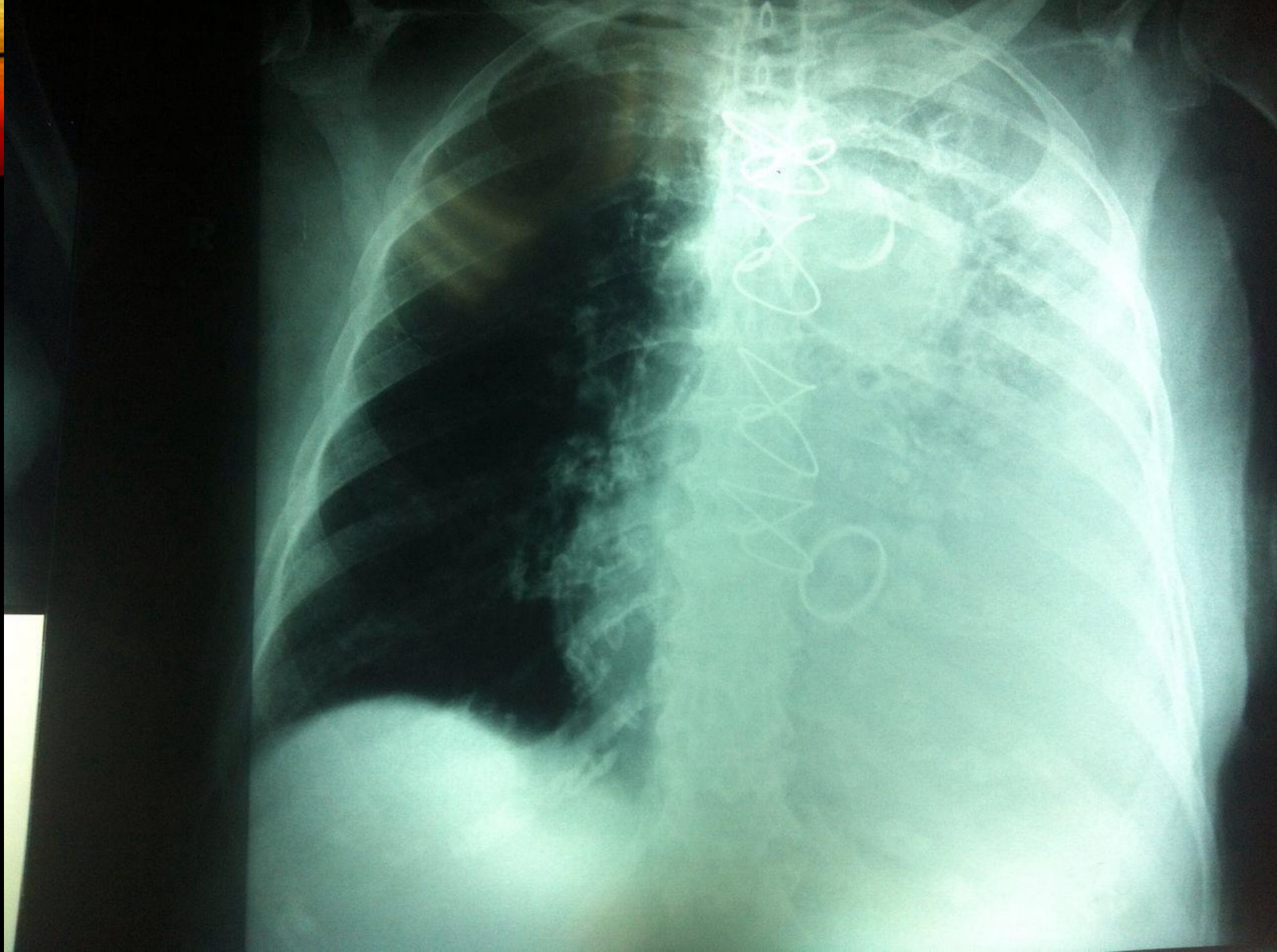
Chest
Coronal
80Y/F
SU/FF/
ALFA SCAN

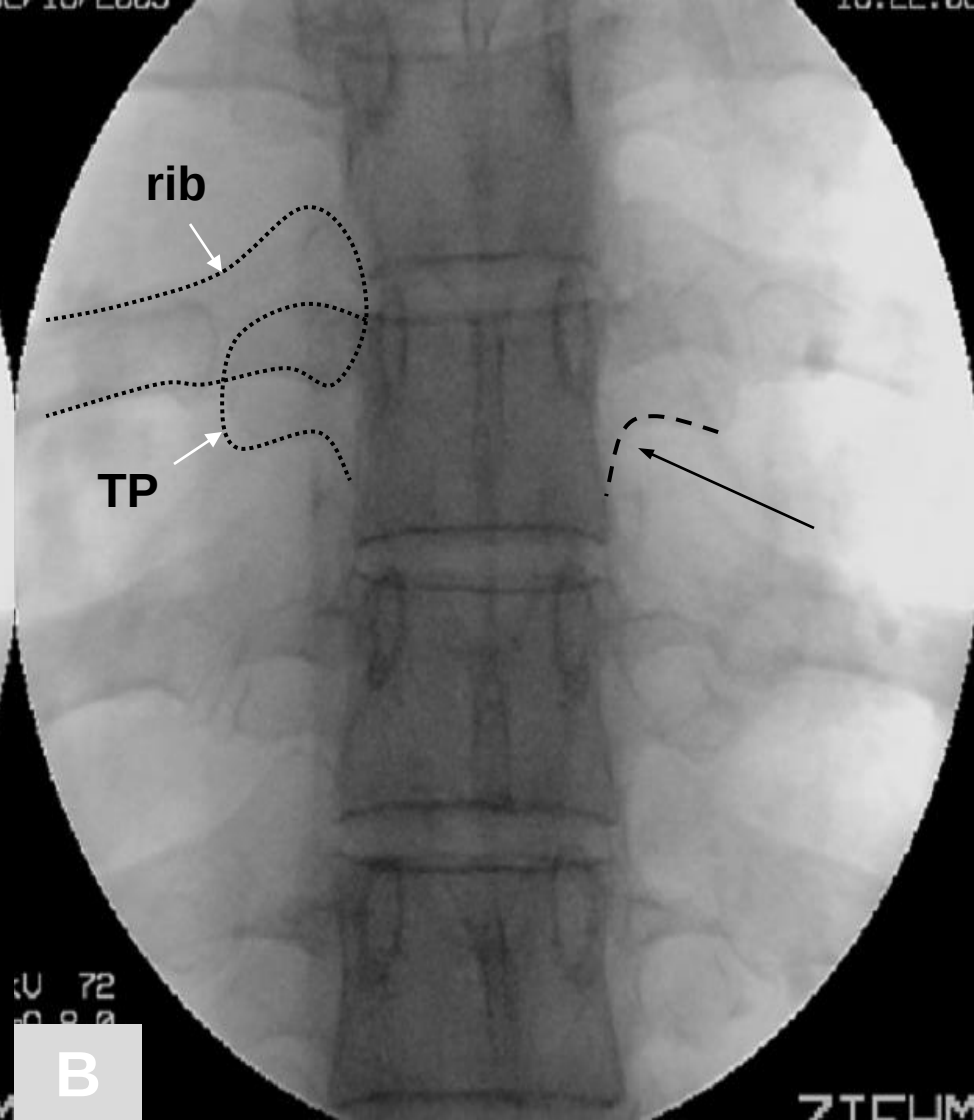
WL= 40
WW= 300
No Contrast
Aquilion

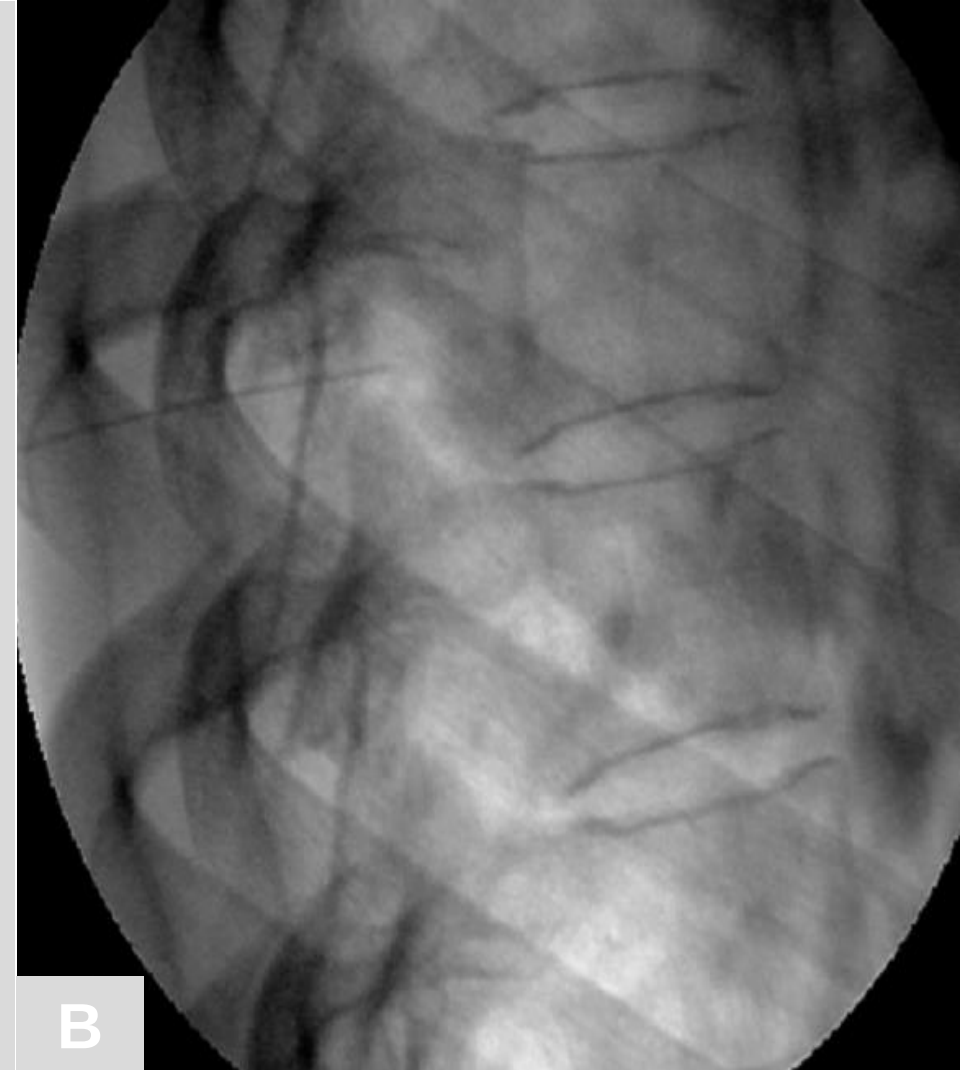


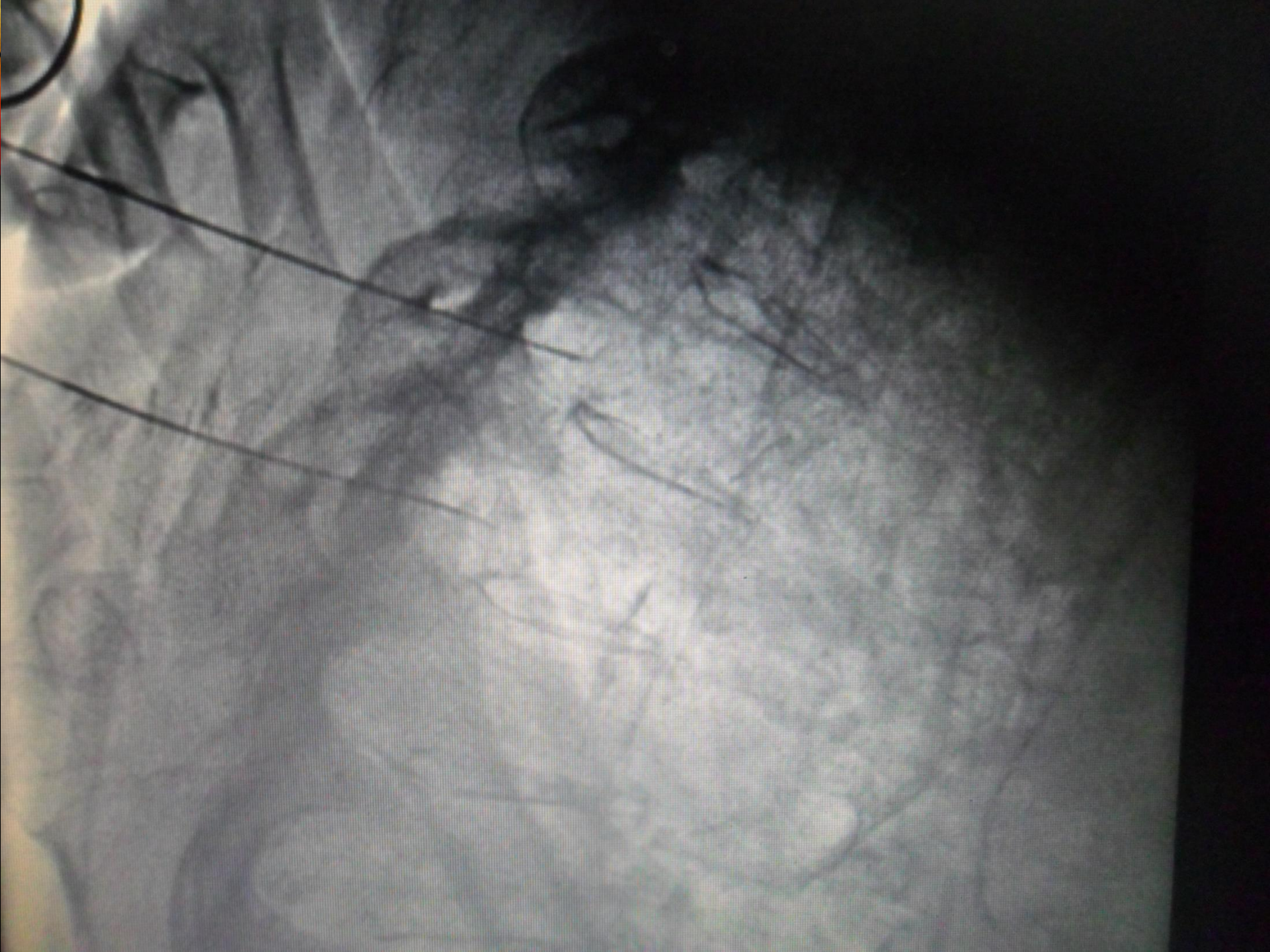
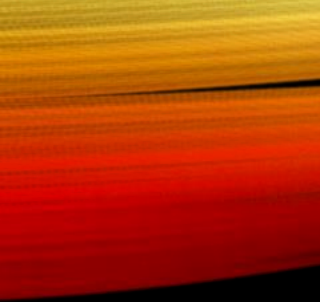
Chest
Axial.15
80Y/F
SU/FF/











uy ESKA...

Filter: Filter 6

AL

8

CASE 3

A 53 years physician is suffering from recent left scapular pain & shoulder pain.

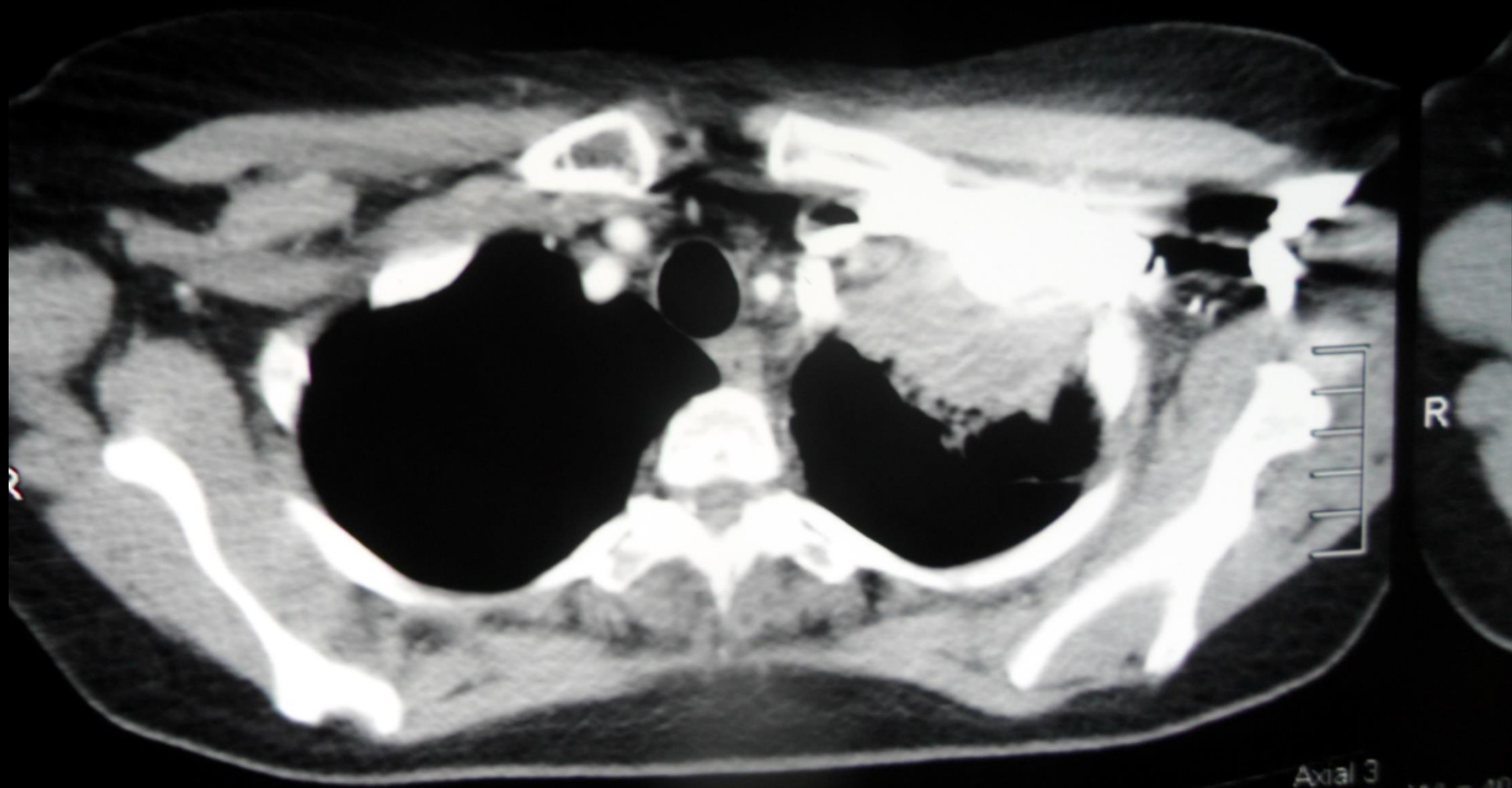
Refused suprascapular Block ...

Pain not responding to NSAID's ...

Neurosurgeon requested Cervical MRI in order to evaluate her radicular symptom .

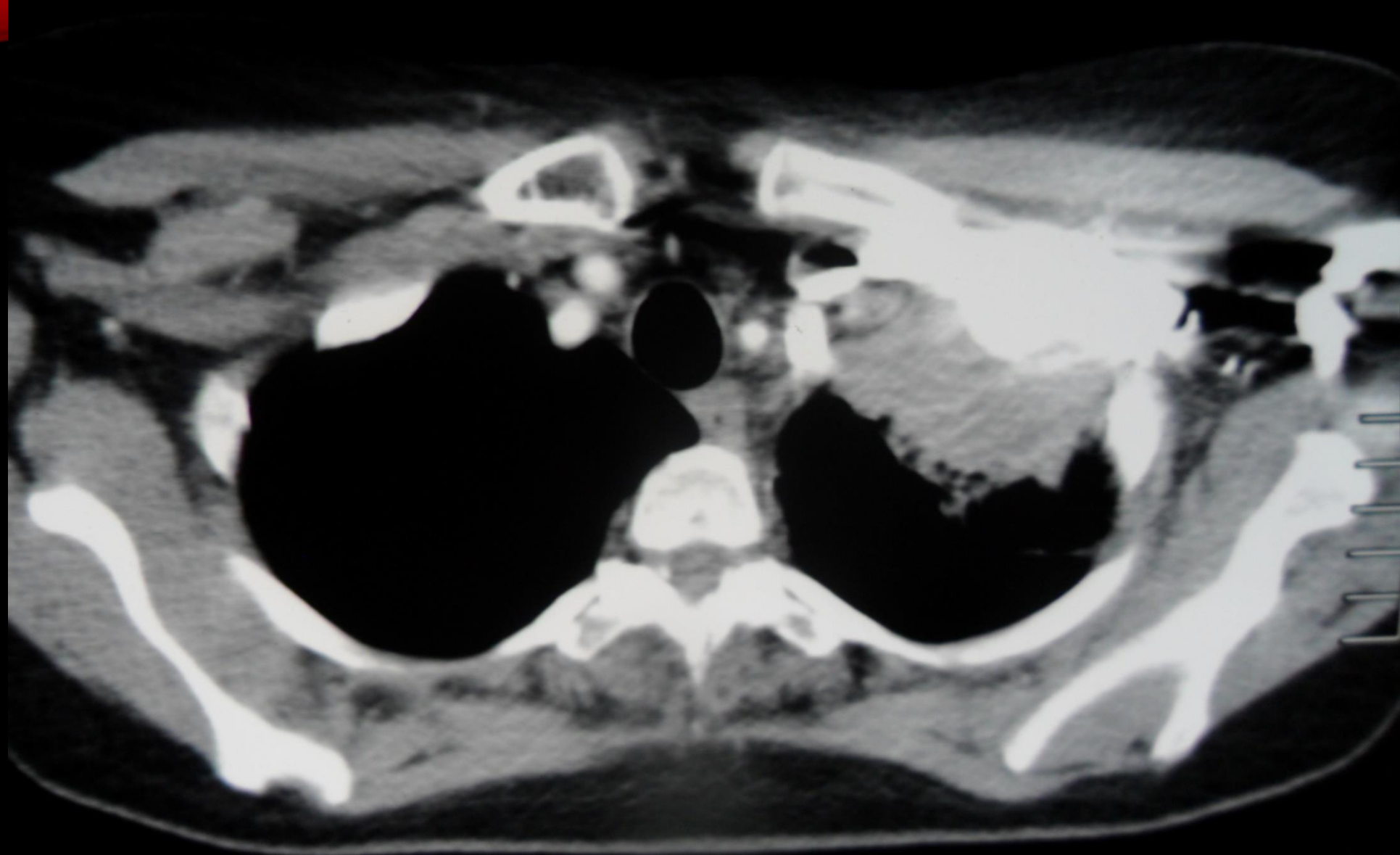
7.3
mm

0.75s/3.0mm/3.0x4 103.1
HP4.5 +0.00

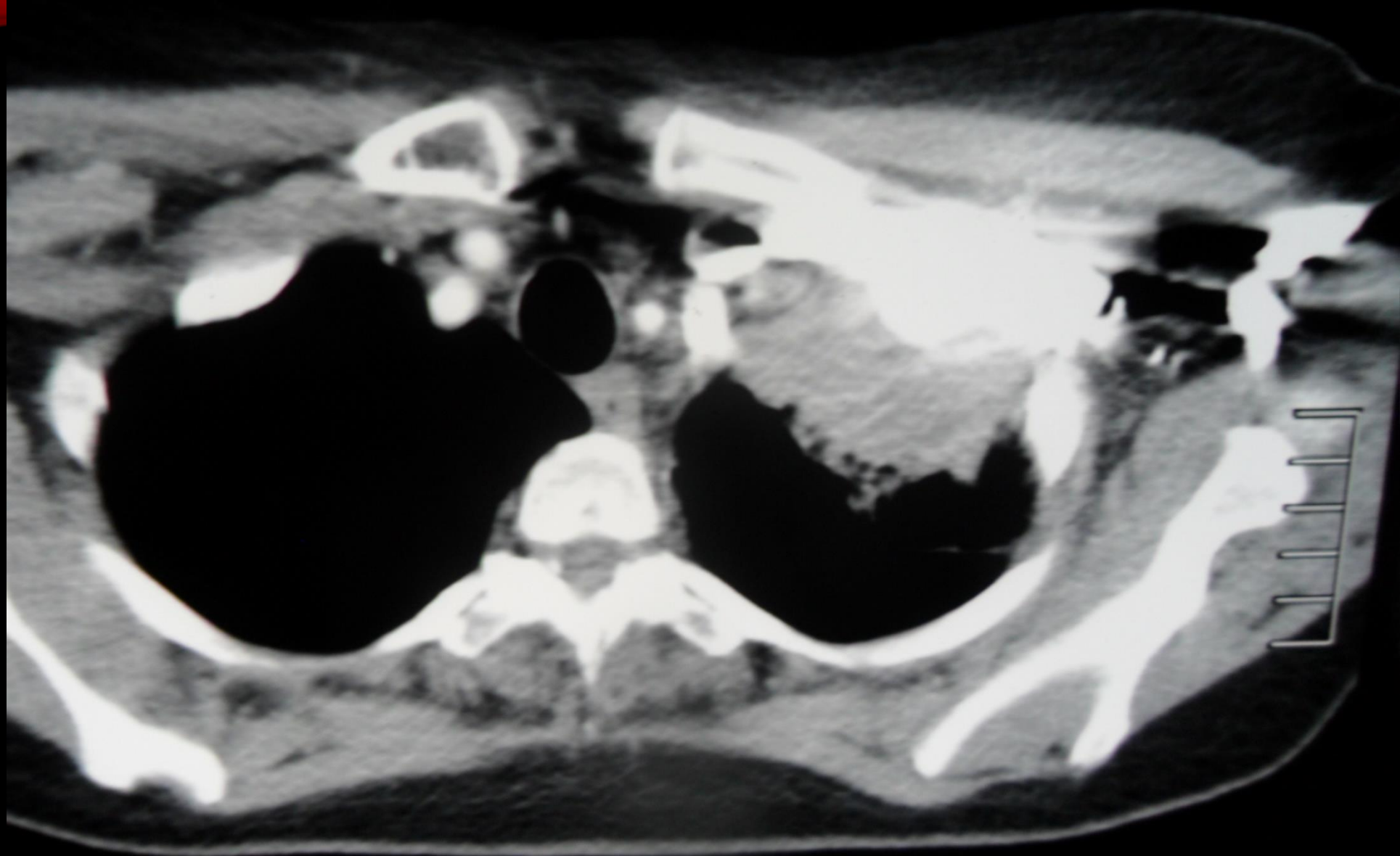


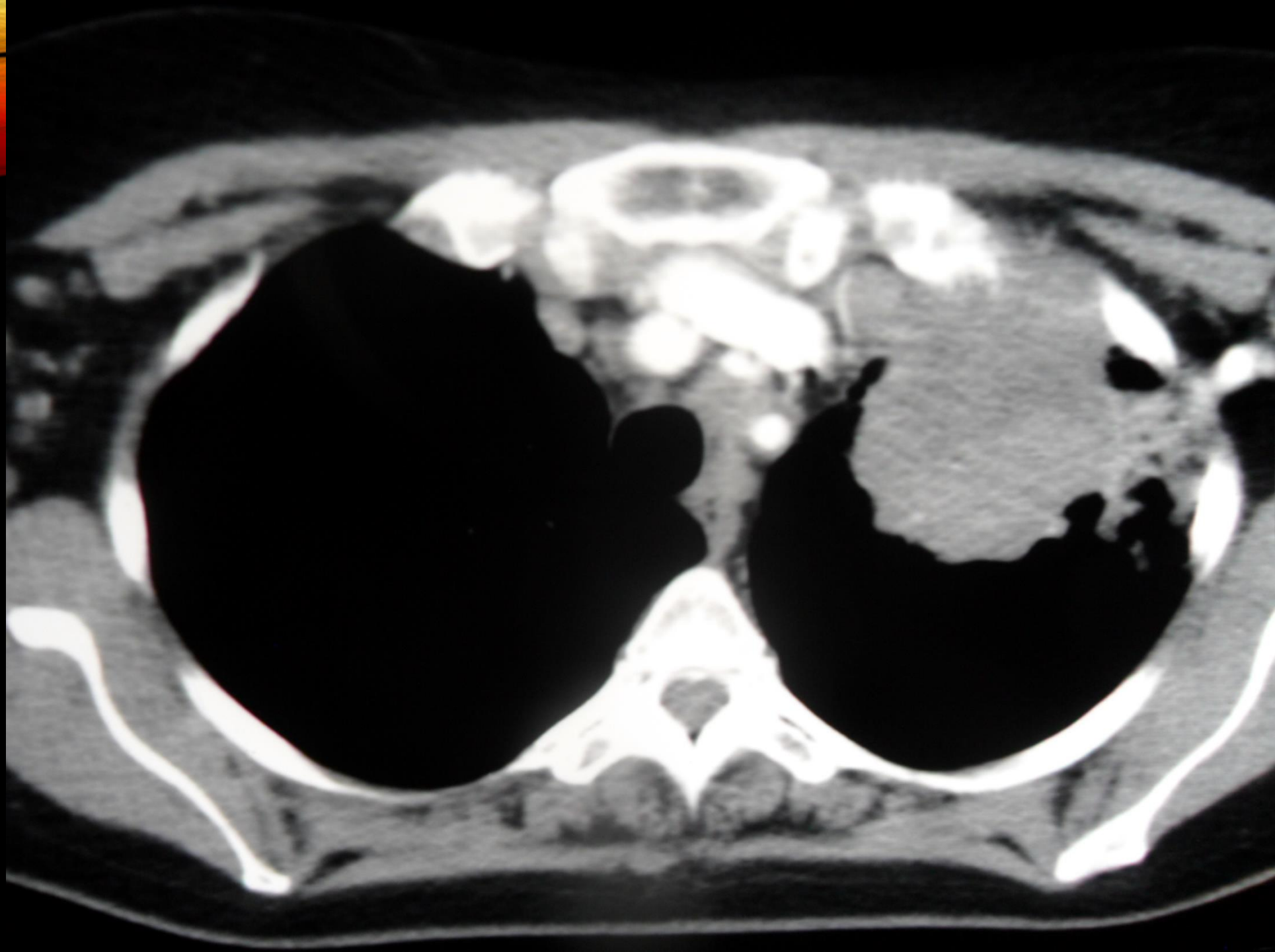
R

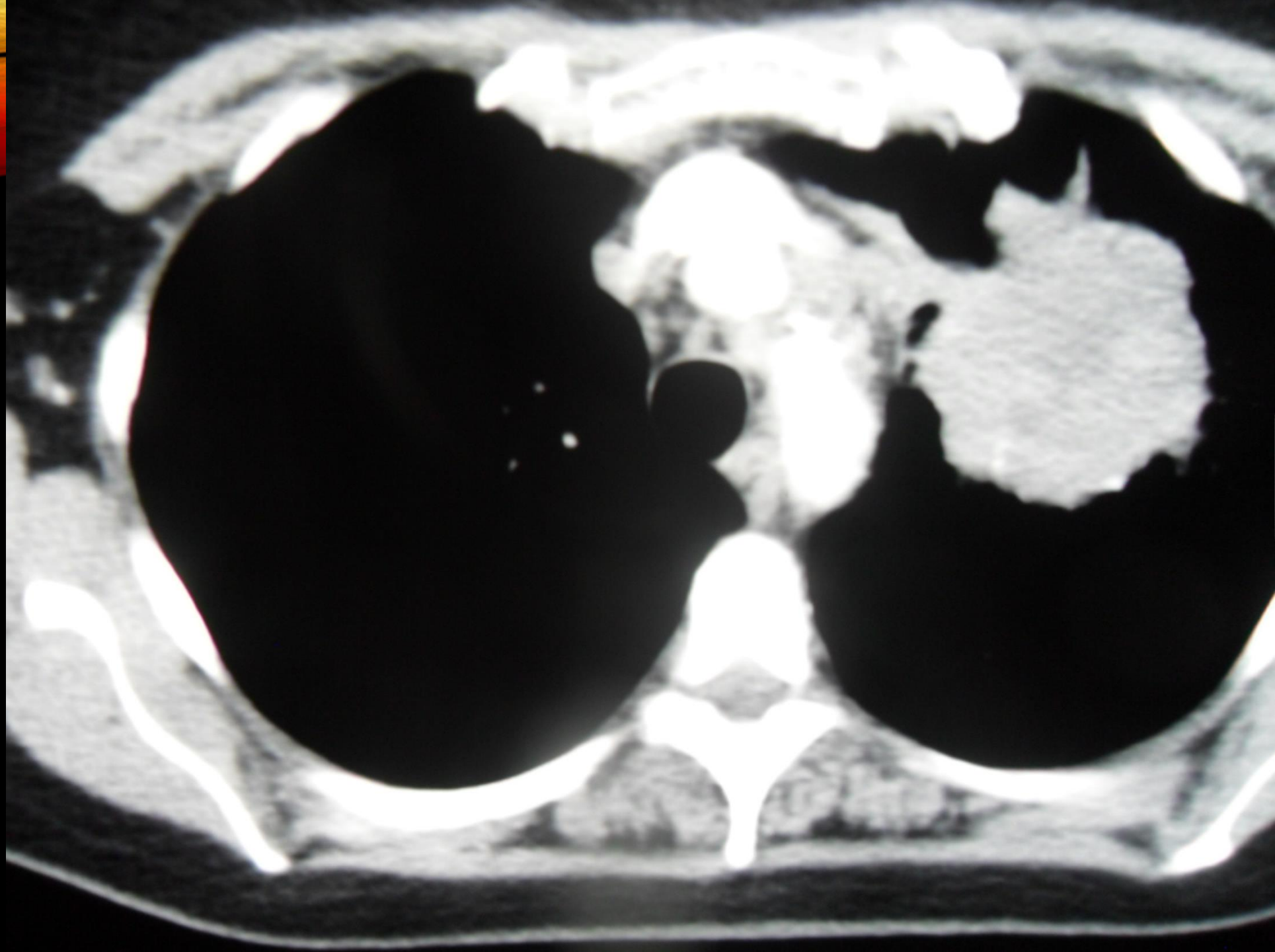
Axial 3
62Y/F WL= 40

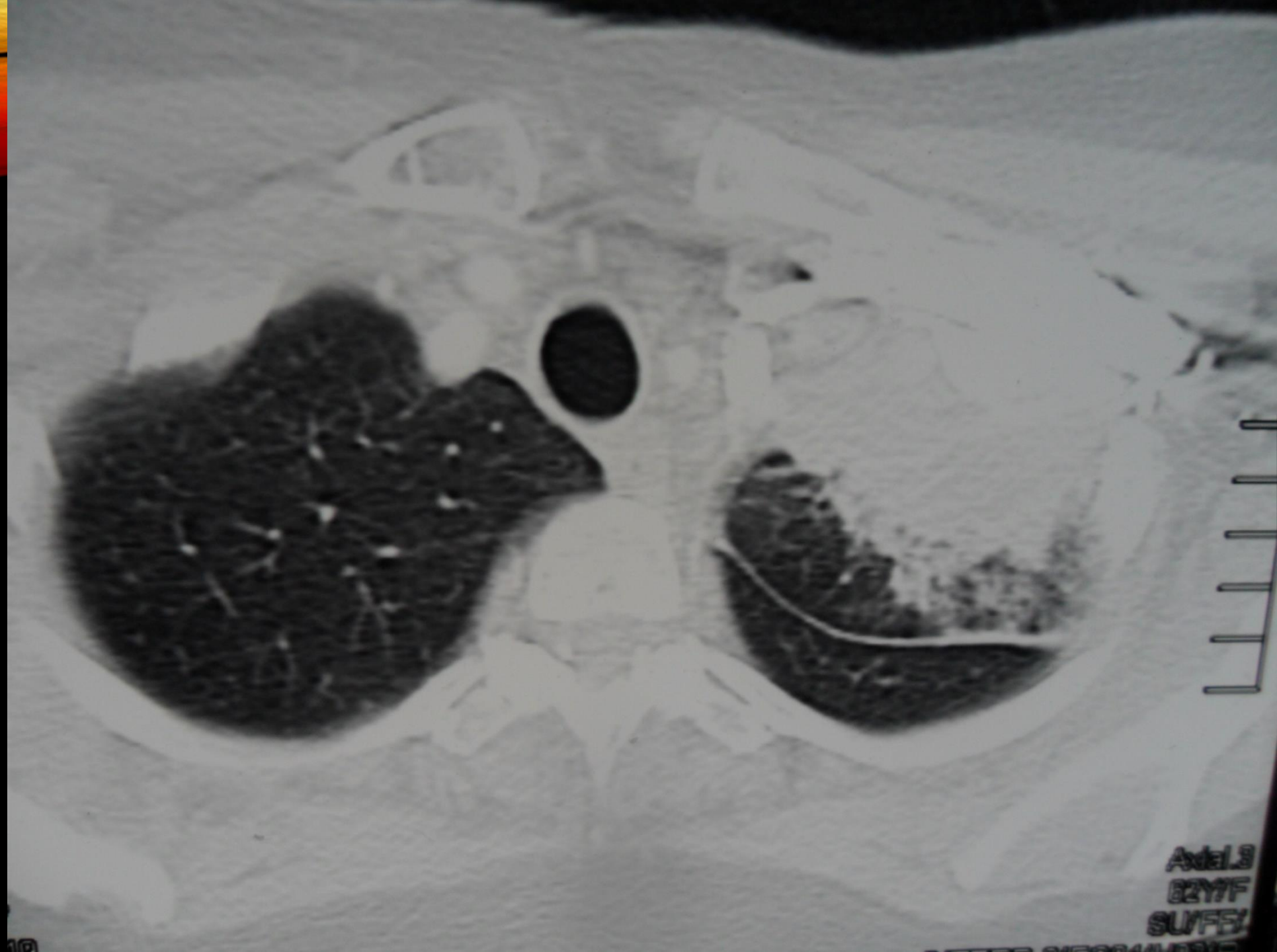


Axial 3









77: 8:10
31mm
00

2014.05.06 14:34:15.28
120kV/ 102mA
0.75s/3.0mm/3.0x4
HP4.8

R



77: 9:13
30mm
.00

2014.05.05 14:24:1
120kV/102
0.75s/3.0mm/2
H

R



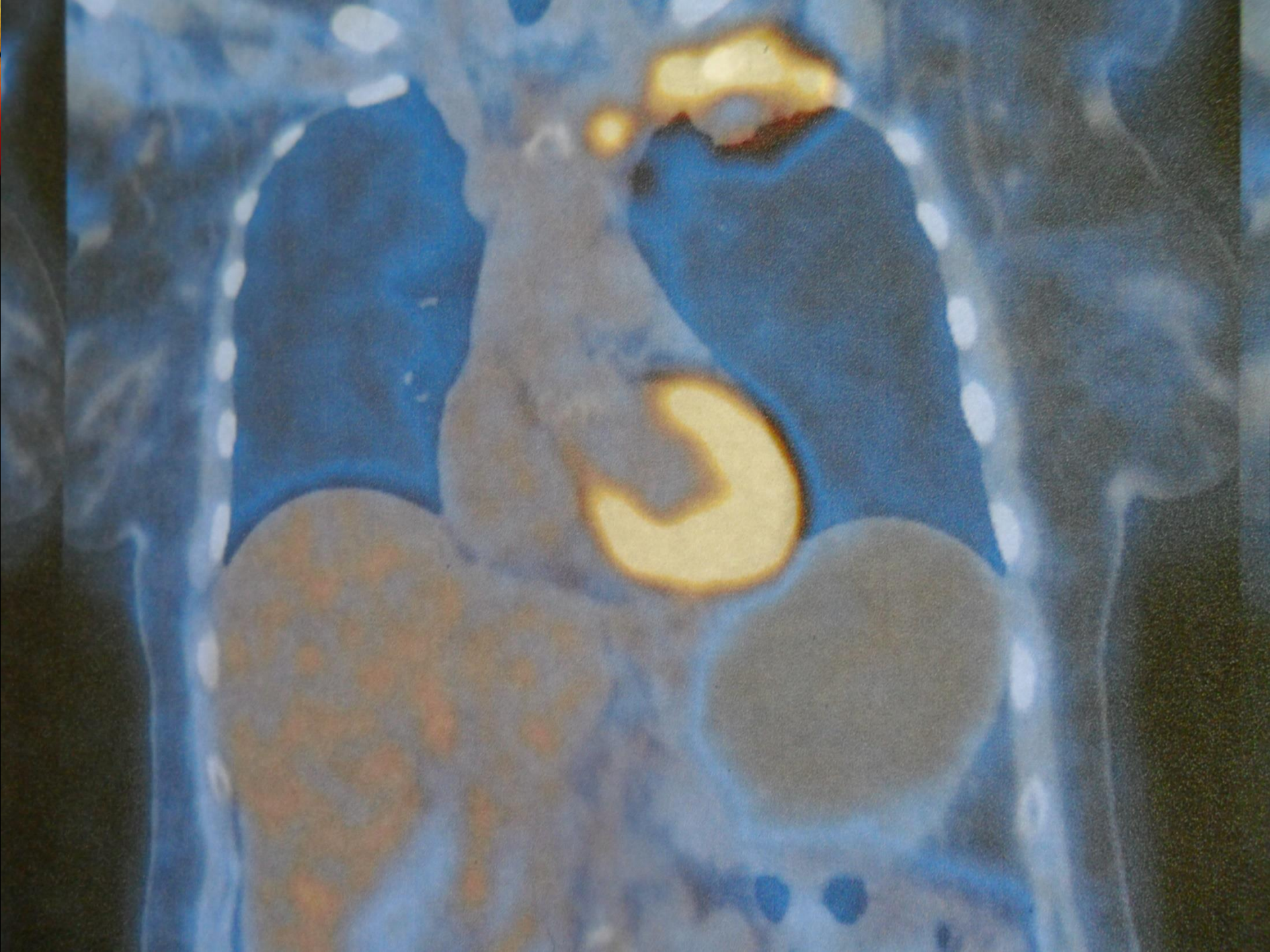
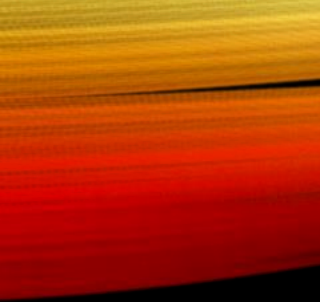
Multislice CT scan of the Chest was performed with

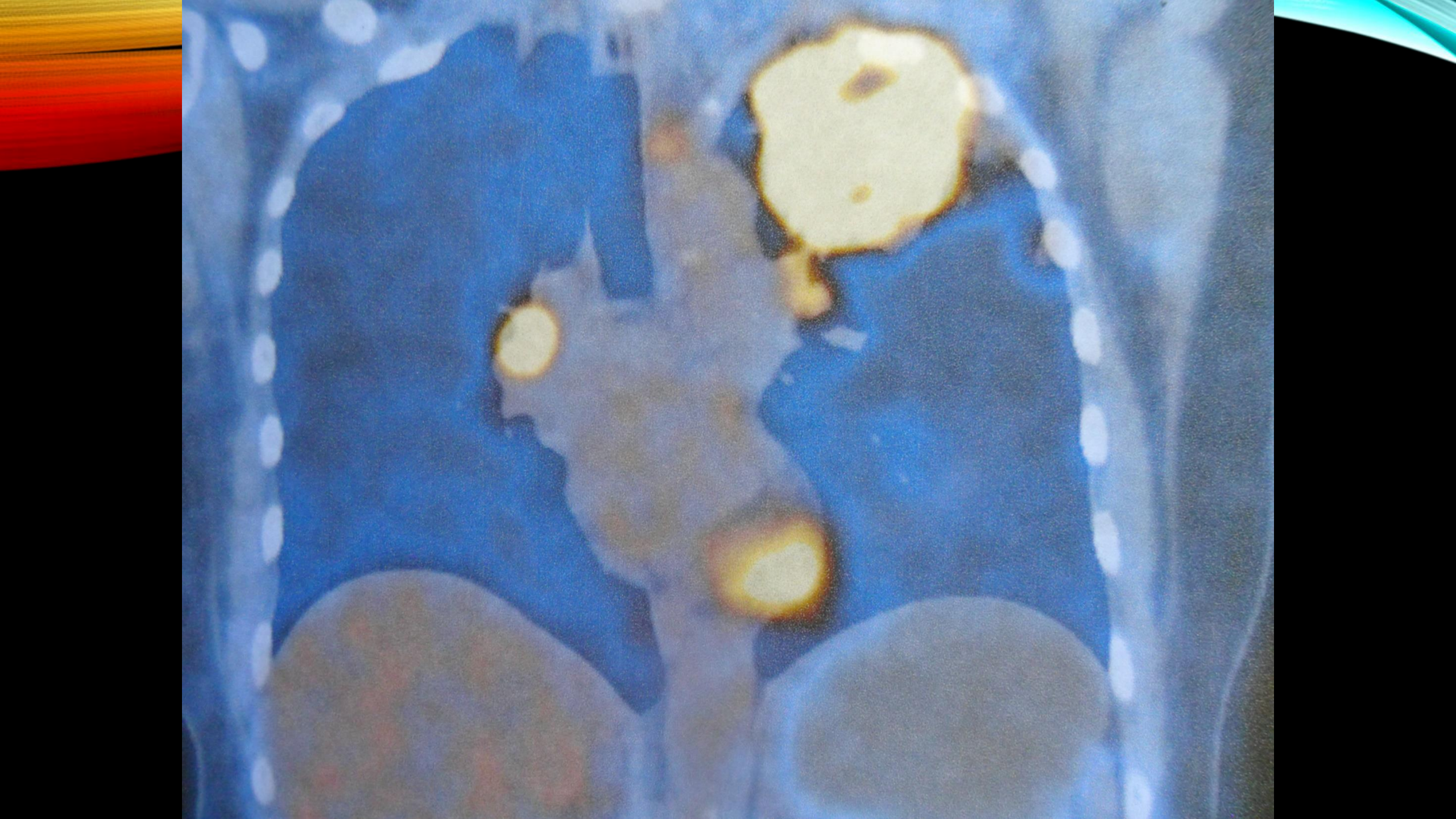
I.V. contrast injection revealed:

- *The study has revealed left upper lobe pulmonary mass lesion measuring about 5.5 x 5.2 x 6 cm , The mass has speculated outer margins and surrounded by reticulations and consolidation that extending to prevascular area and lateral chest wall.*
- *The mass seen reaching the apical centric chest wall with intact ribs.*
- *Multiple right hilar , prevascular , carinal and retrocaval lymph nodes.*
- *Free pleural sacs.*
- *Upper abdominal cuts reveals paraaortic lymphadenopathy measuring 2.4 cm in diameter.*

Opinion:

- *Left upper lung lobe mass lesion likely bronchogenic carcinoma stage T 2 b N 3 M 1 for better PET-CT correlation .*





Acq. Date: 12 May 2011

f
r
S
f
e



Cl: Ser: 201, Pow: 119.01
Pt: Ser: 442, Pow: 119.01

Width: 350 Level: 35
SVF: 1.00 of 1.00

D] Musculoskeletal:-

- No evidence of nasty or serious bony lesions could be elicited on PET/CT examination.

CONCLUSION:-

- Large hypermetabolic neoplastic mass at the left upper lung lobe with lymphatic infiltration of the mediastinal and both hilar lymph nodes, yet no metabolically active distant metastases are depicted.
- The initial staging for this patient is stage IIIB (T3 N3 M0).

MUCH OBLIGED,

MOSTAFA M. ABDEL KAWY, MD

PROF.DR. OMAR HUSSEIN
M.S.

MAGED ABDEL-GALIL, MD
Nuclear Medicine

Case 4

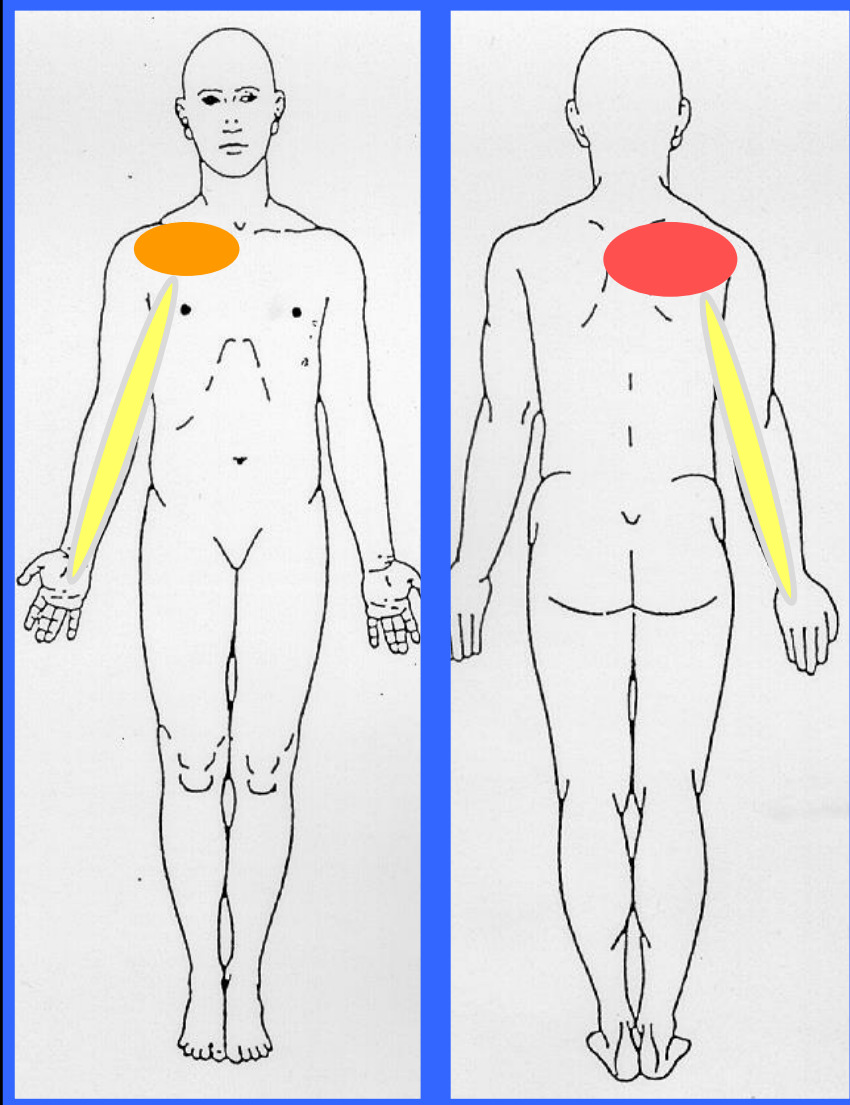
- 42 yo
- small tiles-business
- not married
- no children
- always healthy
- alcohol was a problem



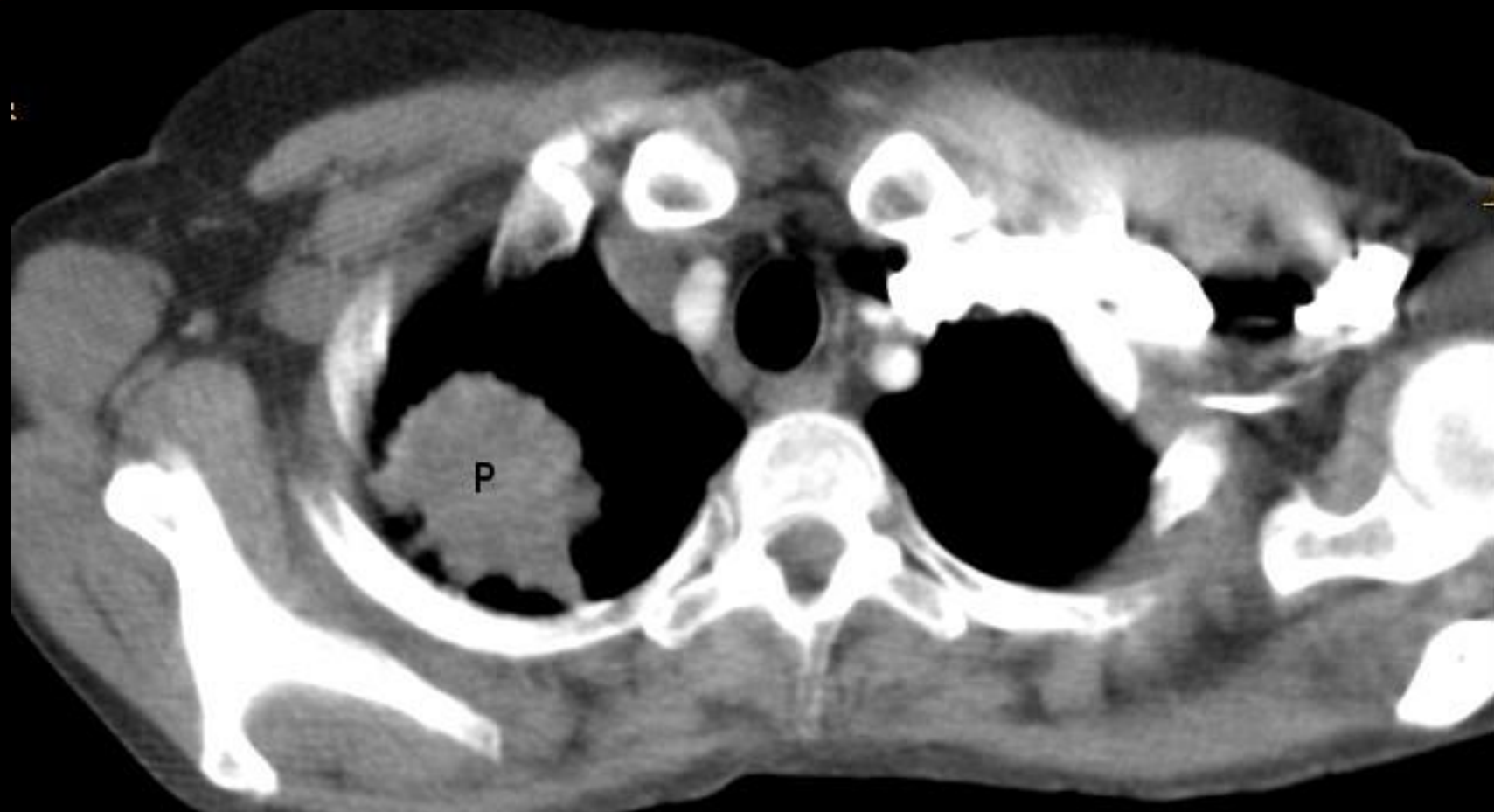
General Patient History

- April:** pain right arm, tingling in fingers
- May:** diagnosis of lung cancer right upper lobe with thoracic wall infiltration
- June:** right lobectomy and thoracic wall resection, macroscopically plexus infiltration
staging: Pancoast-Tumor (T4, G2-3, N0)
- July:** first visit to pain clinic

Special Patient History



- Constant pain
„stabbing, burning“
- Pain with movement
„aching“
- Pain on light touch
- ∅ sympathetic dysregulation





What kind of pain do we have here ?

1) Neuropathic pain

2) Nociceptive pain

3) Mixed pain

4) CRPS (M. Sudeck) pain

5) None of 1 - 4

How to diagnose neuropathic pain

look for signs of allodynia:
pain evoked by light touch ?

look for sensory deficits:
insensibility against touch or cold ?

look for autonomic changes:
skin temperature, sweating, local perfusion ?

What mechanisms cause neuropathic pain ?

Compression of C-fibers:•

carpal tunnel, Disk prolapse , plexopathy in cancer

Automatic firing of damaged nerves and „cross-talk“:•

discus prolaps in the past, postzosteric neuralgia

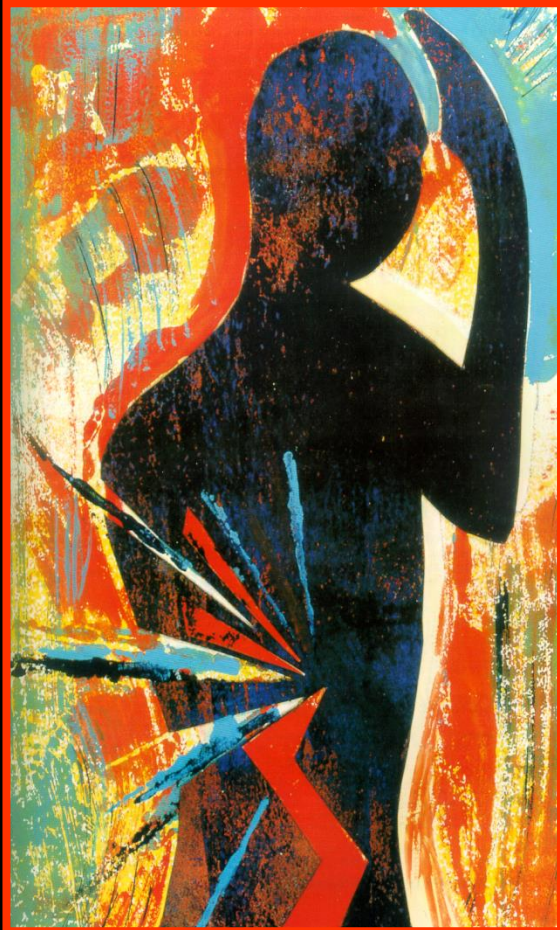
Deafferentation (with anaesthesia dolorosa):•

stroke, trauma, postzosteric neuralgia

Sympathically maintained pain (SMP):•

with vasomotor and sudomotor changes

Medication plan before first visit



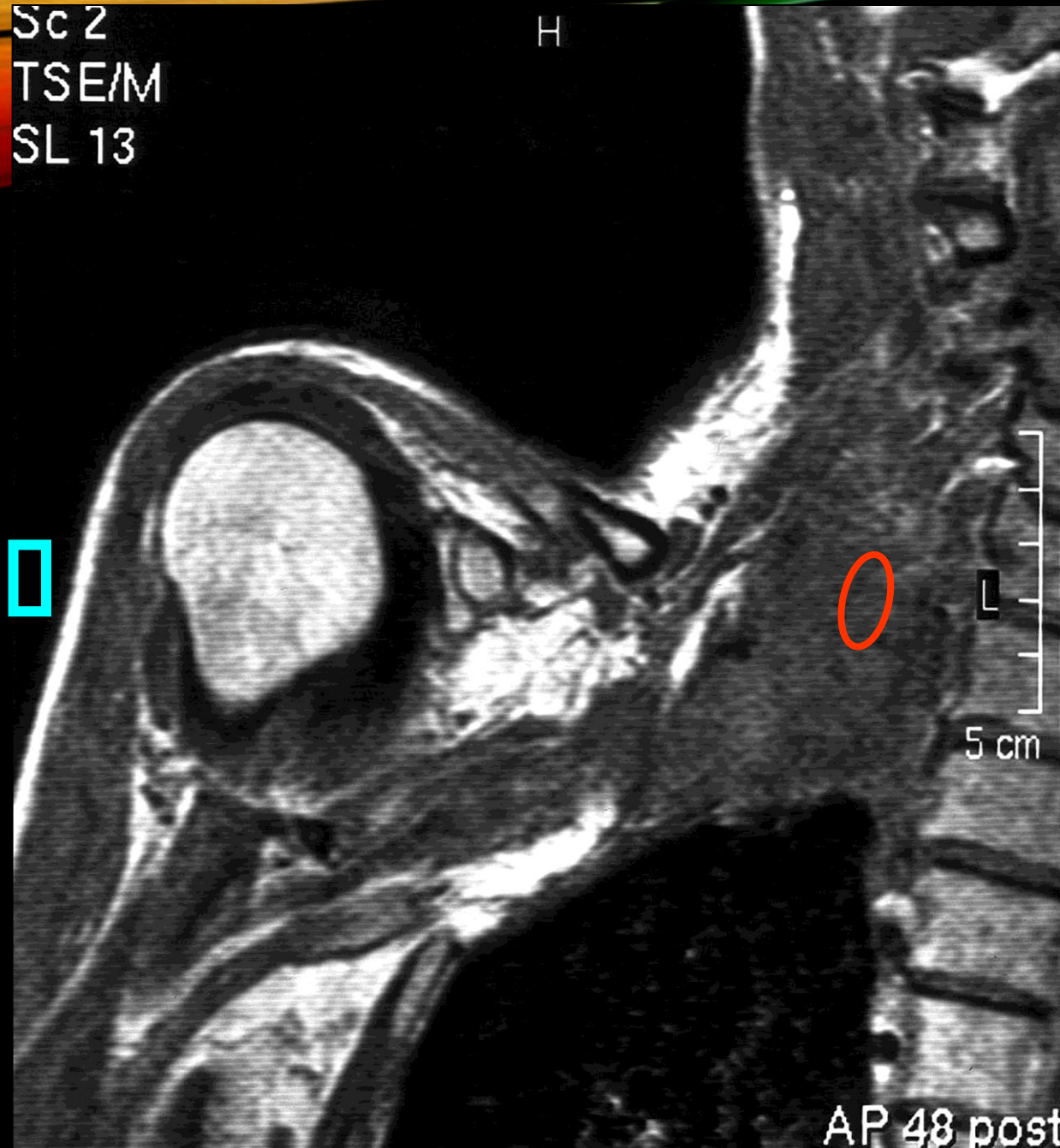
**morphine slow release:-
60-30-60 mg**

**caregiver's comment:-
maximum dose**

**pain intensity while resting:-
NAS 80**

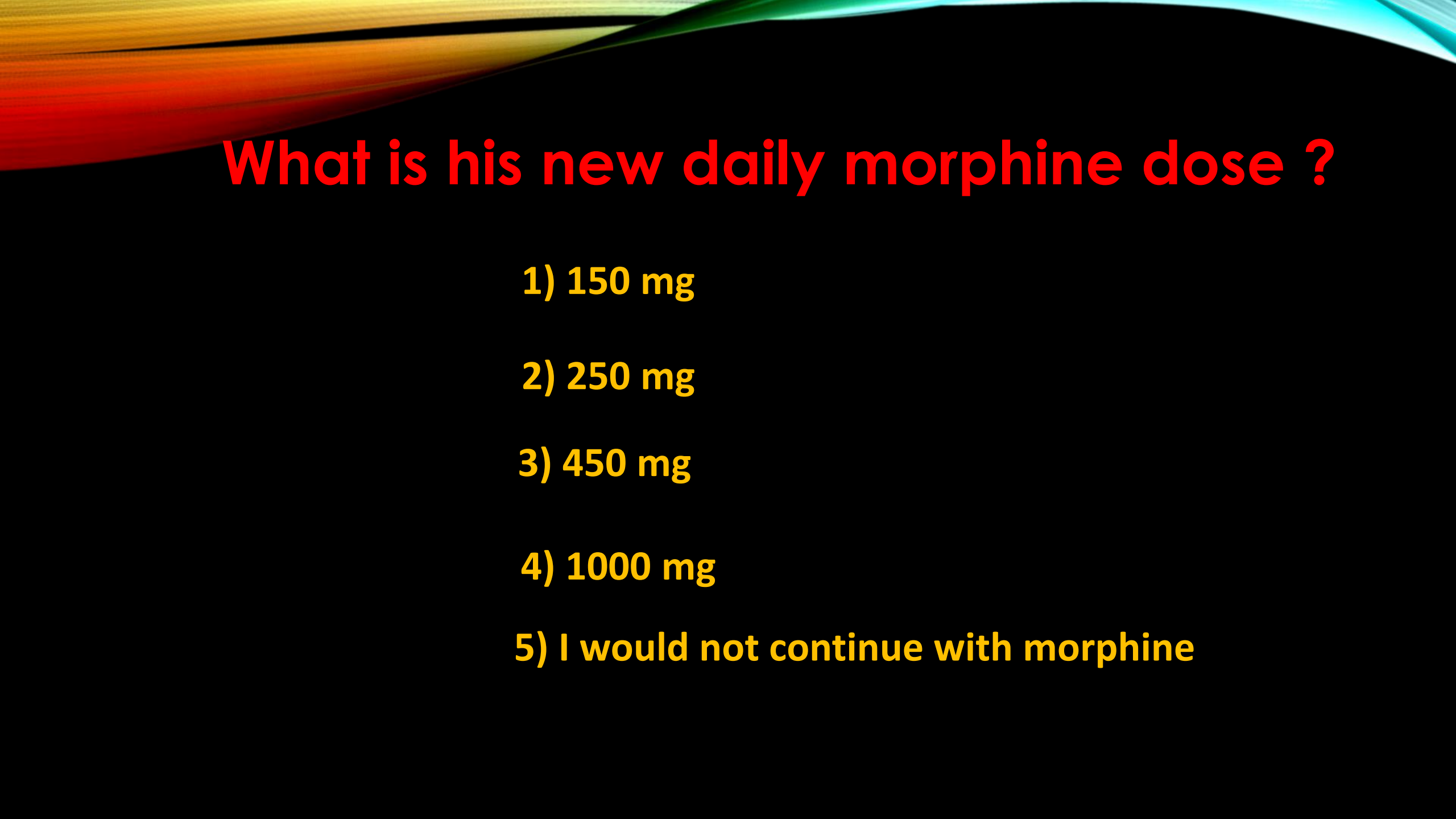
Sc 2
TSE/M
SL 13

H



Real reason

1. Cancer progress
2. Plexus-infiltration



What is his new daily morphine dose ?

1) 150 mg

2) 250 mg

3) 450 mg

4) 1000 mg

5) I would not continue with morphine

Calculation of new daily morphine dose

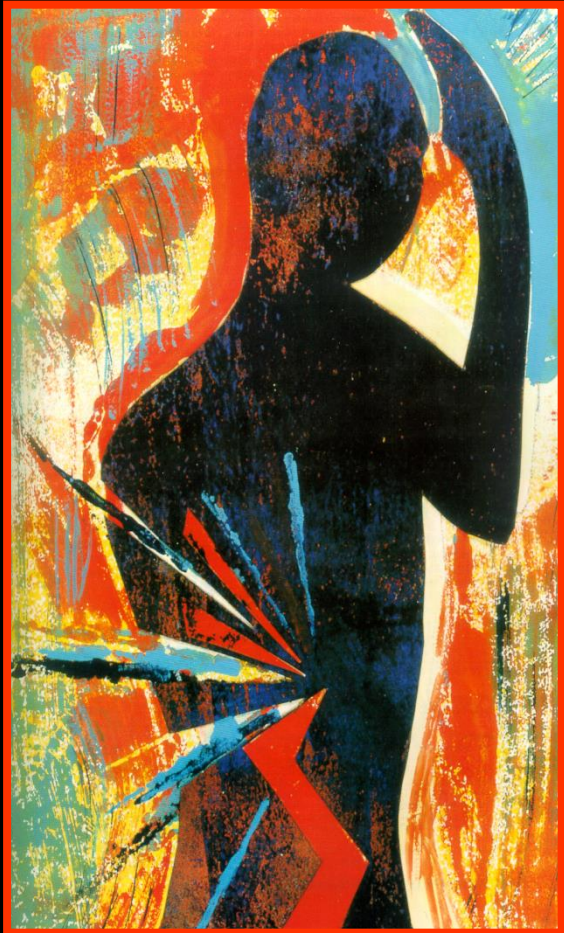
- before: 150 mg
- addition: 30 mg x 4 (for 24 hrs) = 120 mg
120 mg x 3 (for oral appl.) = 360 mg
- new dose: 3 x 150 mg morphine slow release
- plus on demand: 50 mg IR morphine (= 10% DD)



Pain intensity in rest: 2-3

Pain intensity when moving the right arm: 6

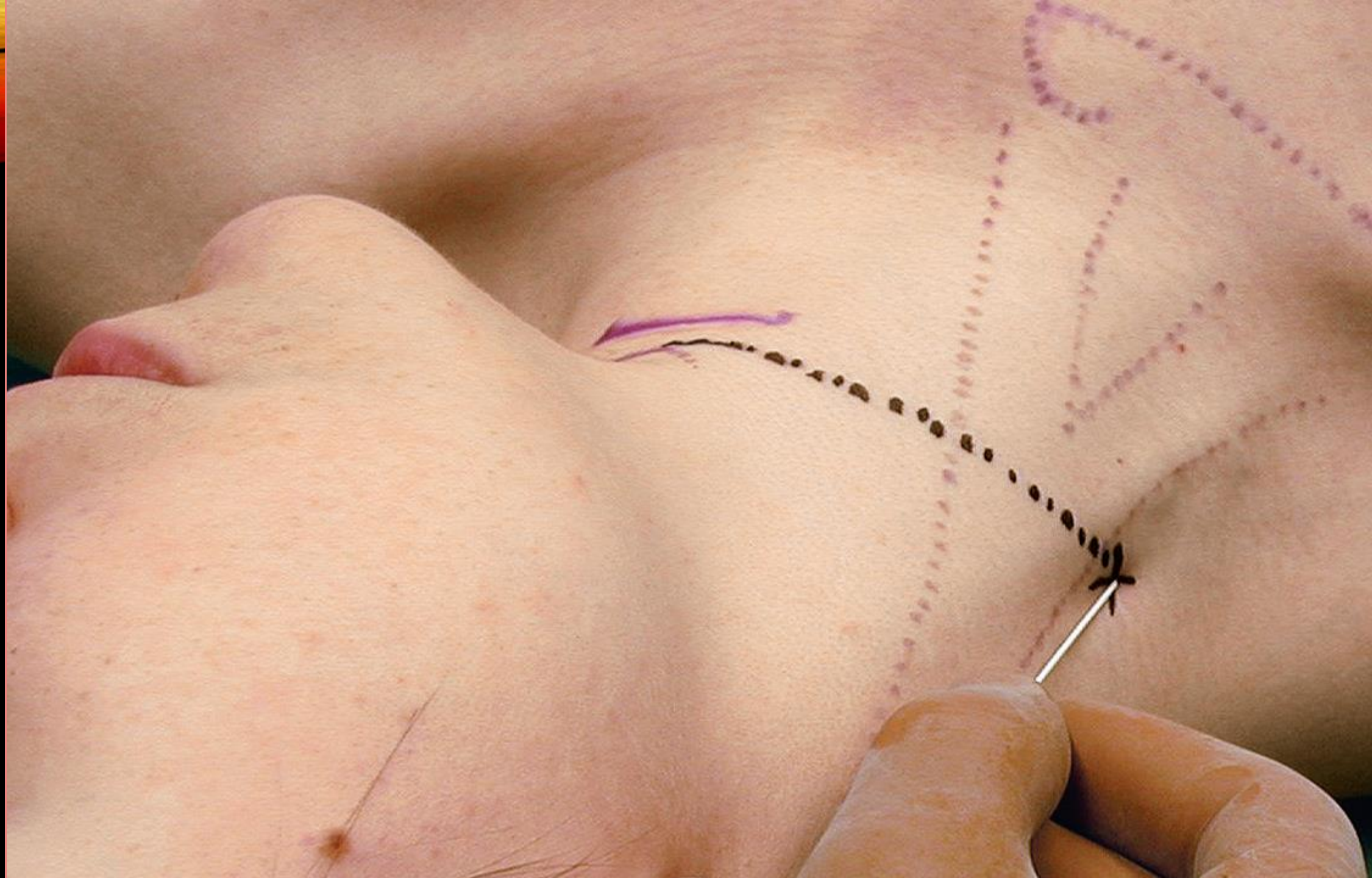
Six weeks later (August) ...



Suddenly:

Pain at rest 80

Pain when moving 100

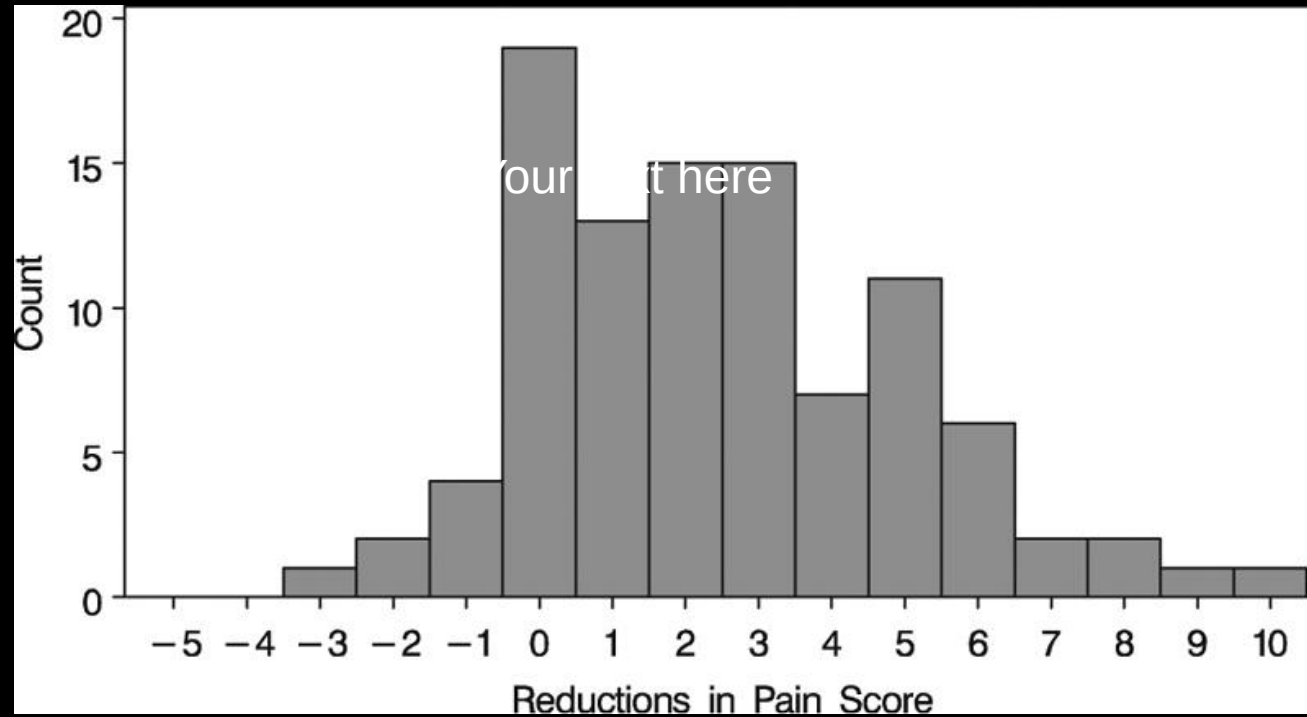




LIGNOCAINE I.V. IN NEUROPATHIC PAIN

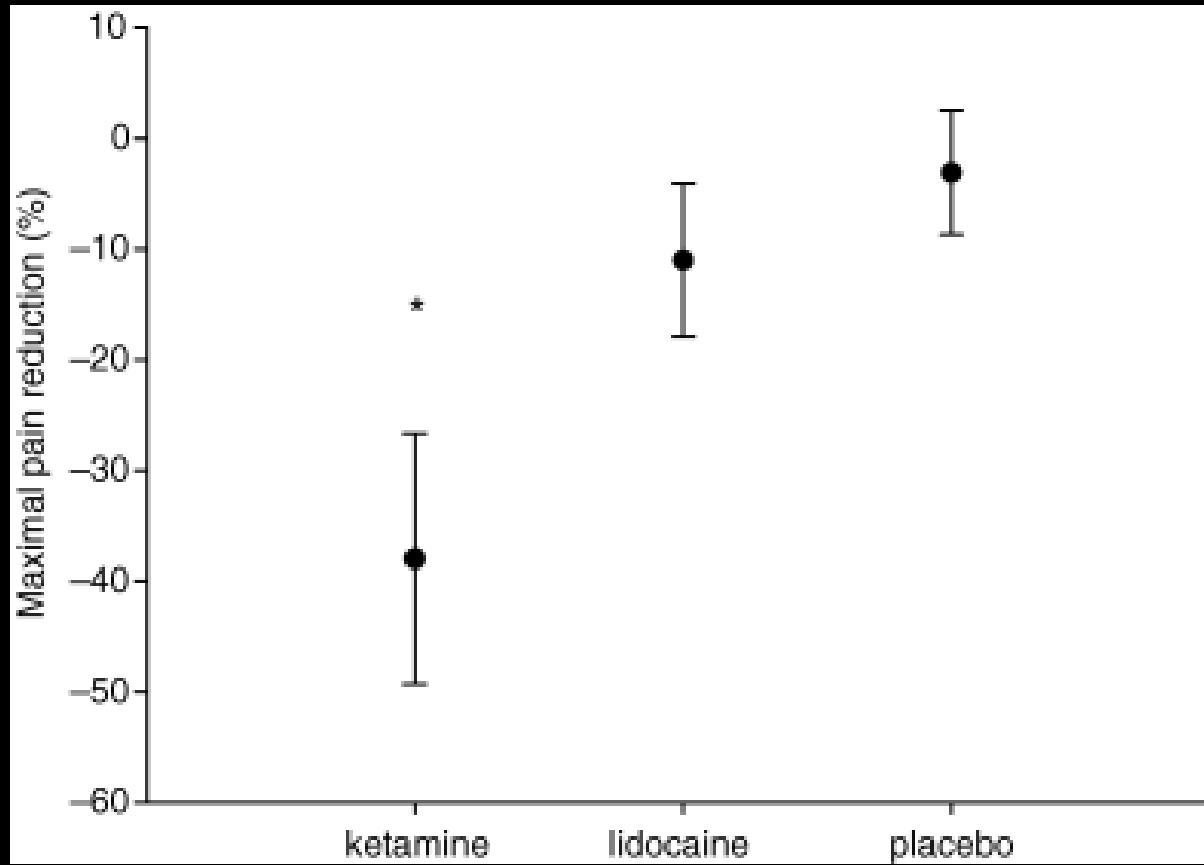
Carroll I, Clin J Pain 2007; 23: 702-706

LIGNOCAINE I.V. IN NEUROPATHIC PAIN



Carroll I, Clin J Pain 2007; 23: 702-706

KETAMINE AS RESCUE MEDICATION



Ketamine 0.4 mg/kg*hr
S-Ketamine 0.2 mg/kg*hr

Titrate to effect:
start 0.05 mg/kg*hr,•
increase every ½ hr•
each step 0.05 mg/kg*hr•
add bed rails•
midazolam only prn•

CONCLUSION

Many Variable different Presentations depending on sites in Lung Cancer

- **Generalized weakness & inability to walk .**
- **Nipple Pain & Intercostal dermatomal pain .**
- **Suprascapular & Shoulder pain .**
- **Shooting neuropathic hand & forearm pain.**
- **Unresolved repeated coughing (chest infection).**

Classically: Bloody sputum, Dyspnoea, Chest pain, weight loss & loss of appetite.

Metastasis : Blood & Lymph nodes:

Adrenal glands, Bone, Brain, Liver, Other lung.