



ΠΑΡΟΥΣΙΑΣΗ ΠΕΡΙΣΤΑΤΙΚΩΝ

NEKTARIOS ANAGNOSTOPOULOS
MD,PHD,MSC

ACADEMIC ASSOCIATE IN INTERVENTIONAL
PULMONOLOGY DEPARTMENT

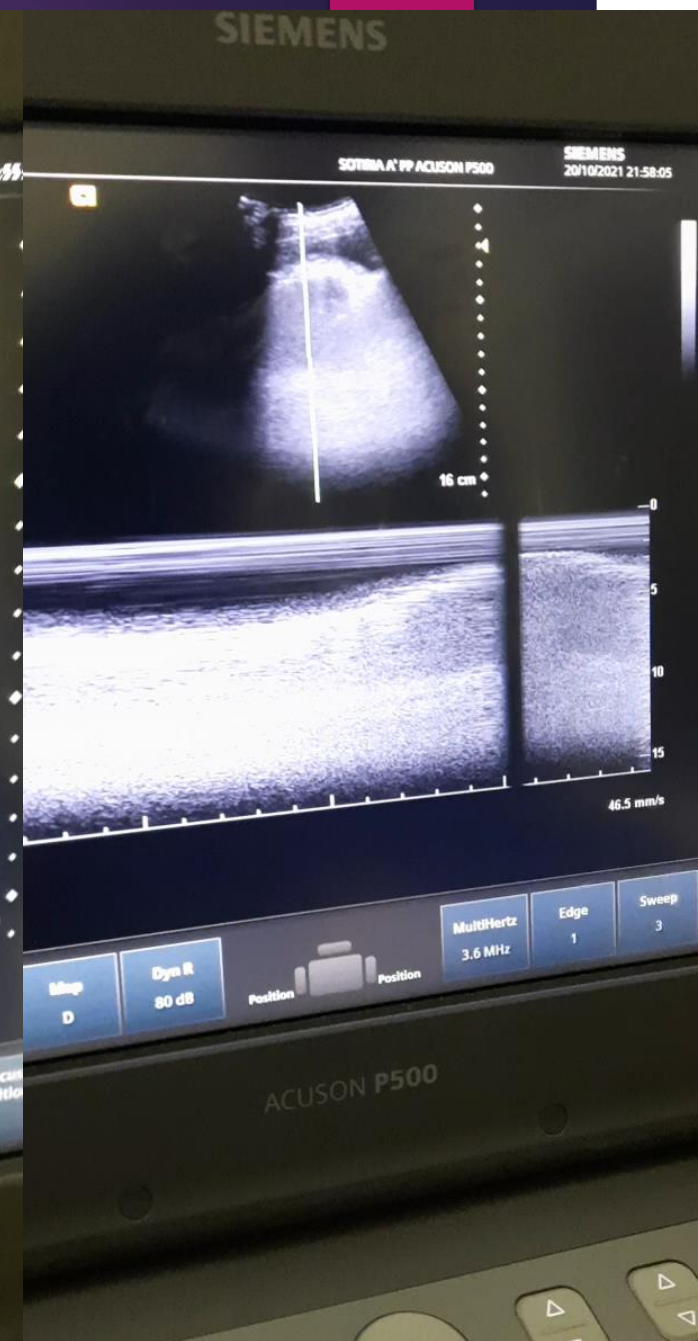
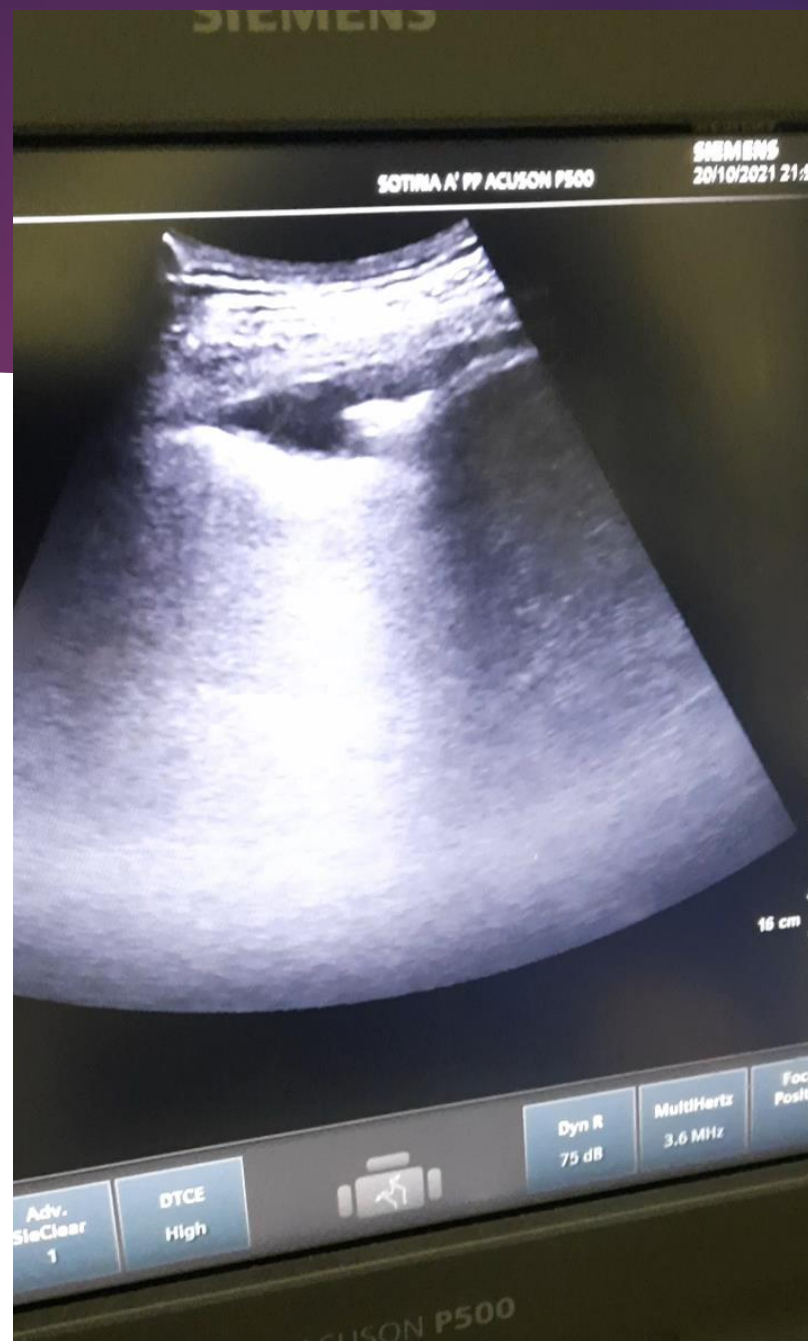
1ST RESPIRATORY CLINIC, UNIVERSITY OF ATHENS

'SOTIRIA' HOSPITAL

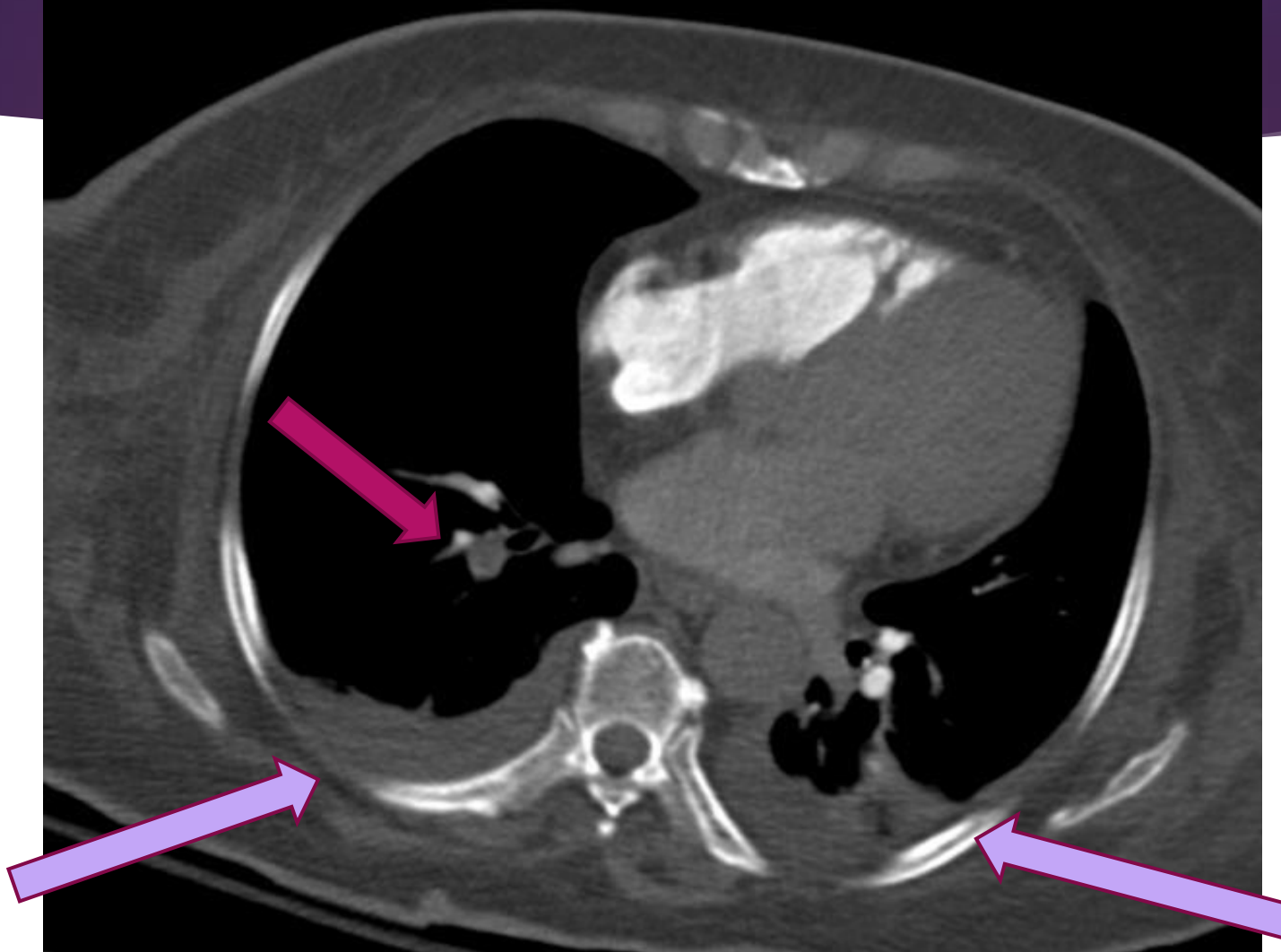


CASE 1

- ▶ ♂, 52, smoker, DM, AH, sudden onset of pleural chest pain, shortness of breath.
- ▶ CXR: No abnormalities, ABGs: PO₂: 56 mmHg, PCO₂: 32 mmHg, PH: 7.49, HCO₃: 21 μmol on room air. ECG : SR Tach, BP:140/60mmHg
- ▶ D-dimers: 2,34 (<0,50)

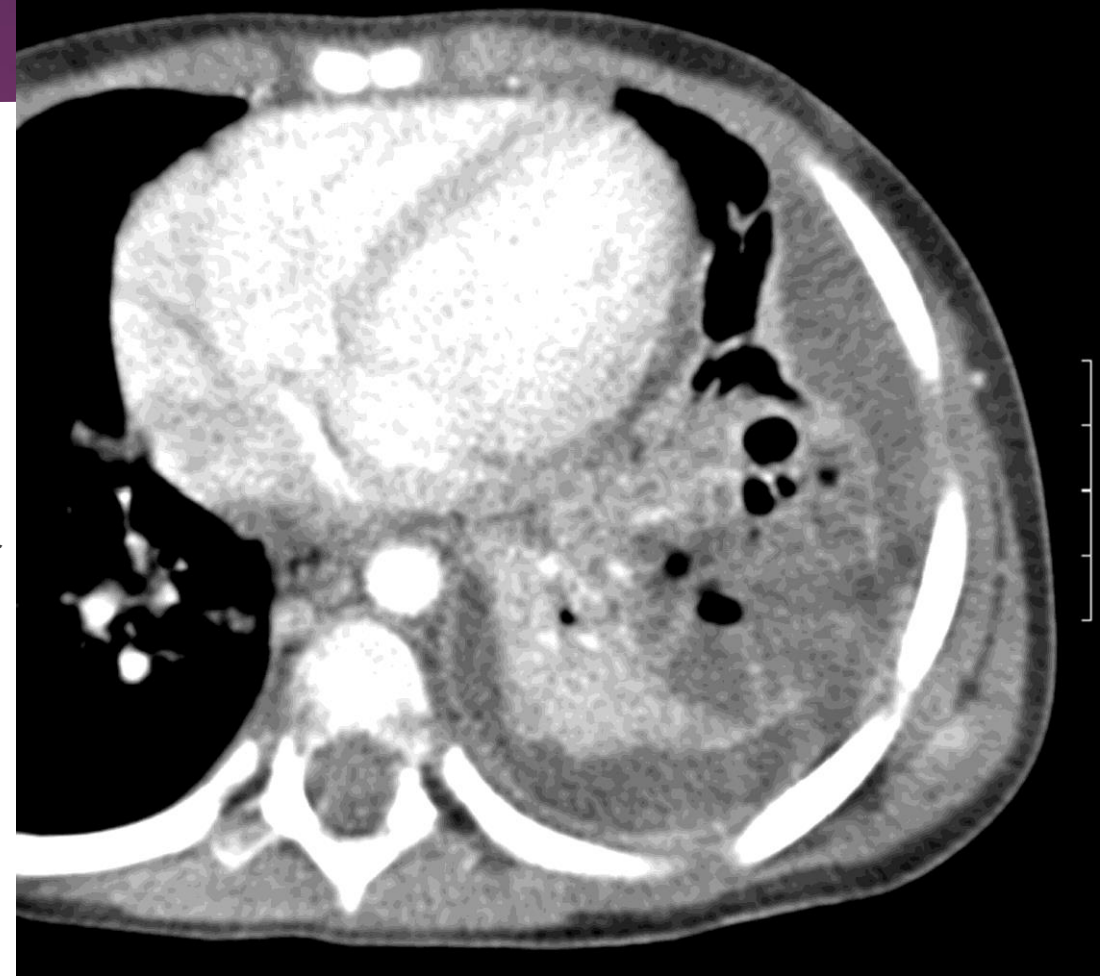


Warning: Not for diagnostic use



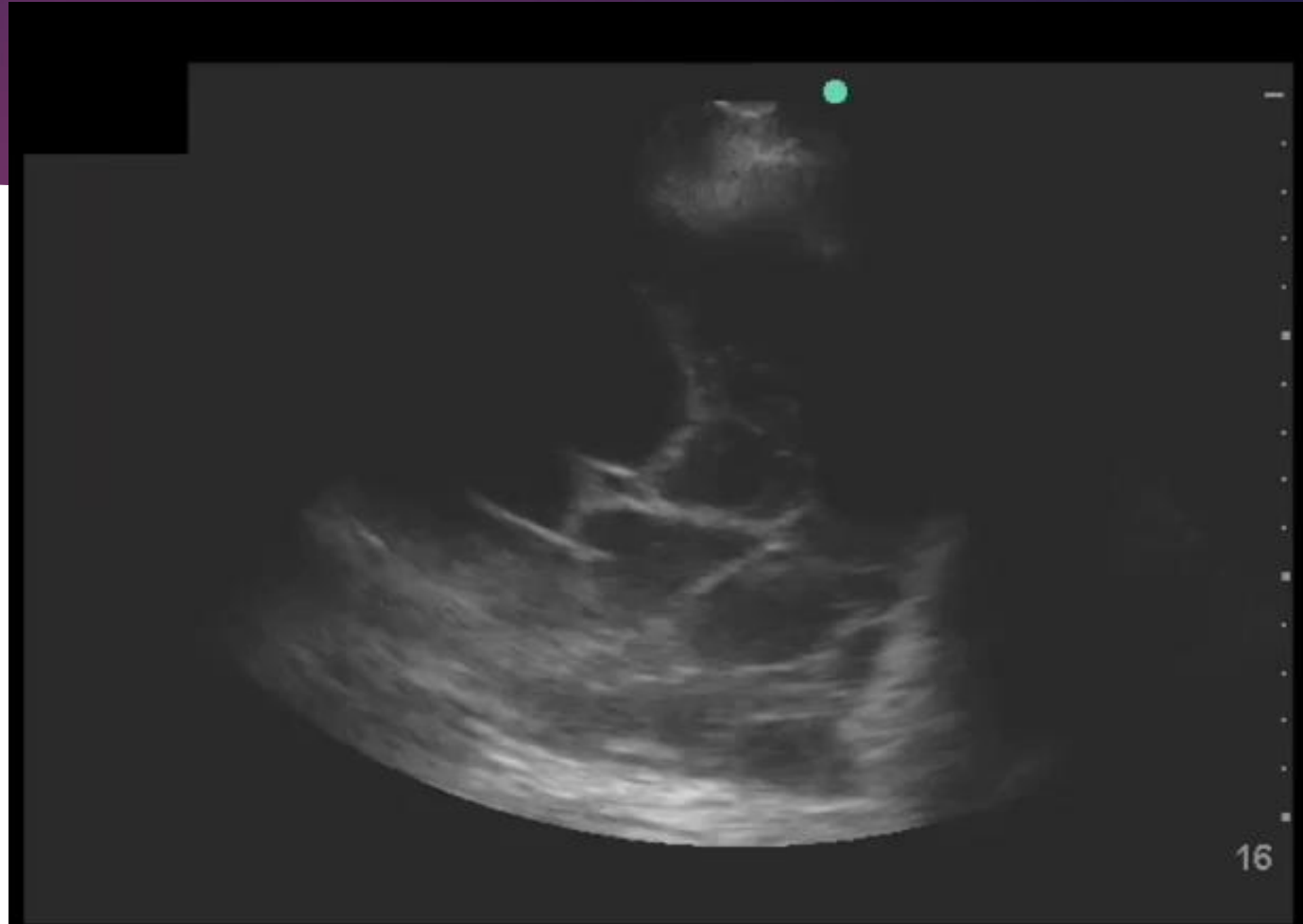
CASE 2

- ▶ ♀, 76, ex smoker, COPD, DM, TAVI, AH, fever 39,2° C for 3 days, cough, dyspnoea on exertion.
- ▶ CXR revealed consolidation on left lower lobe
- ▶ Admitted in hospital and received IV Ceftriaxone plus Moxifloxacin.
- ▶ After 72H developed left chest pain, relapse of fever
- ▶ CT scan revealed consolidation with air bubble sign on left lower lobe and mild to moderate pleural effusion



CASE 2

- ▶ Thoracentesis revealed a polymorphonuclear exudate with PH: 7,12, Glu: 22 mg/dl, LDH: 1300, Pro: 4,5 gr.
- ▶ A 32G thoracic tube was inserted with insufficient drainage in the first 24h,
- ▶ Intrapleural Alteplase fibrinolysis was performed



CASE 2

- ▶ After 24h repeat U/s was performed.
- ▶ Patient remained afebrile and discharged after 3 days with oral antibiotics.

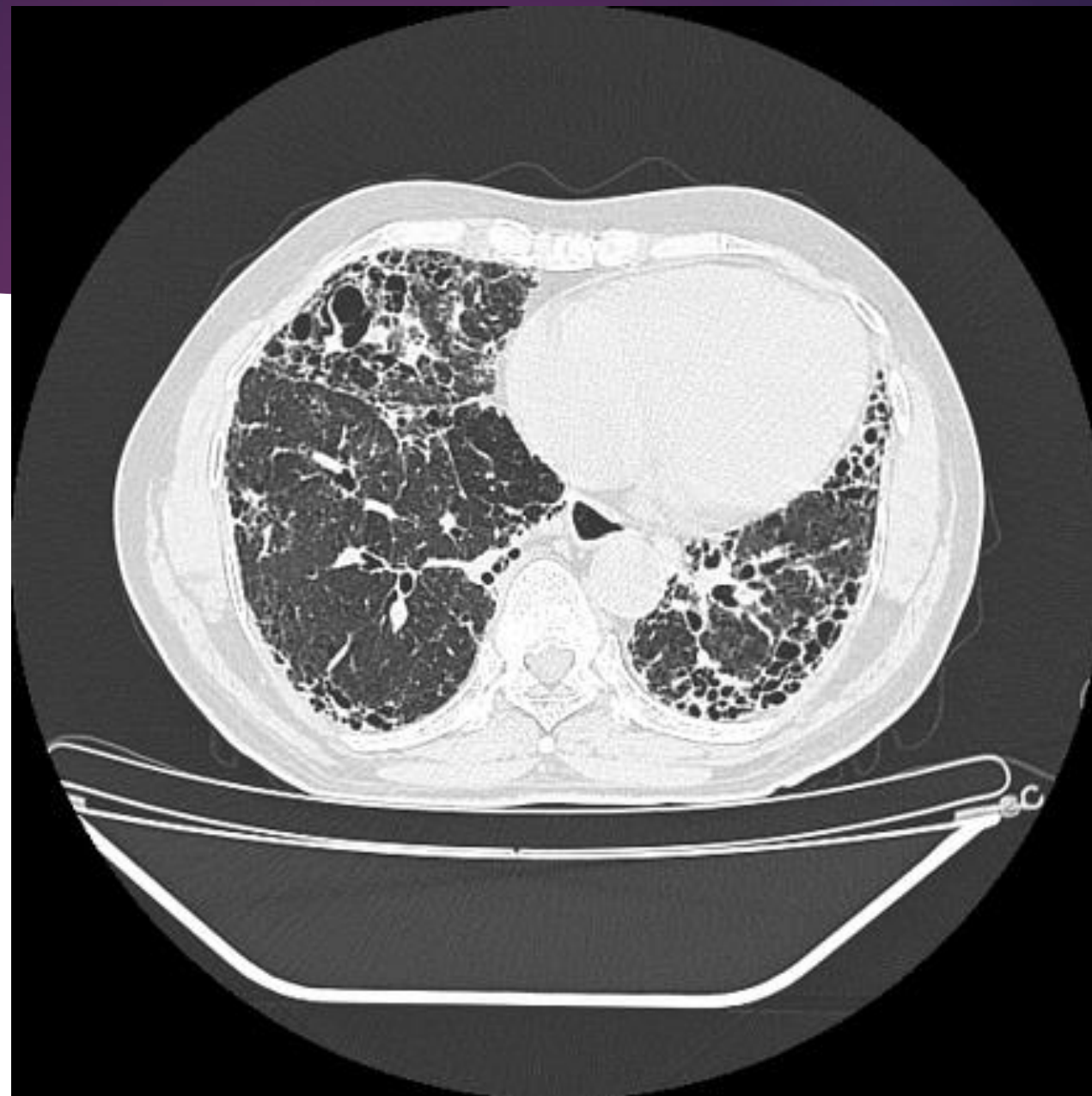


CASE 3

- ▶ ♂, 78, ex smoker 80py, NSTEMI, CABG, AH, DM, shortness of breath Mmrc:3-4 for past year.
- ▶ Respiratory Crackles, finger clubbing
- ▶ HR: 105/min, Sat:97% on room air,BP:140/86mmHg
- ▶ PFTs: FEV1:74%, FVC:54%, Tif: 89%, DLCO: 43%, 6MWT<100m
- ▶ Heart echo: EF: 45%, RSVP:55mmHg

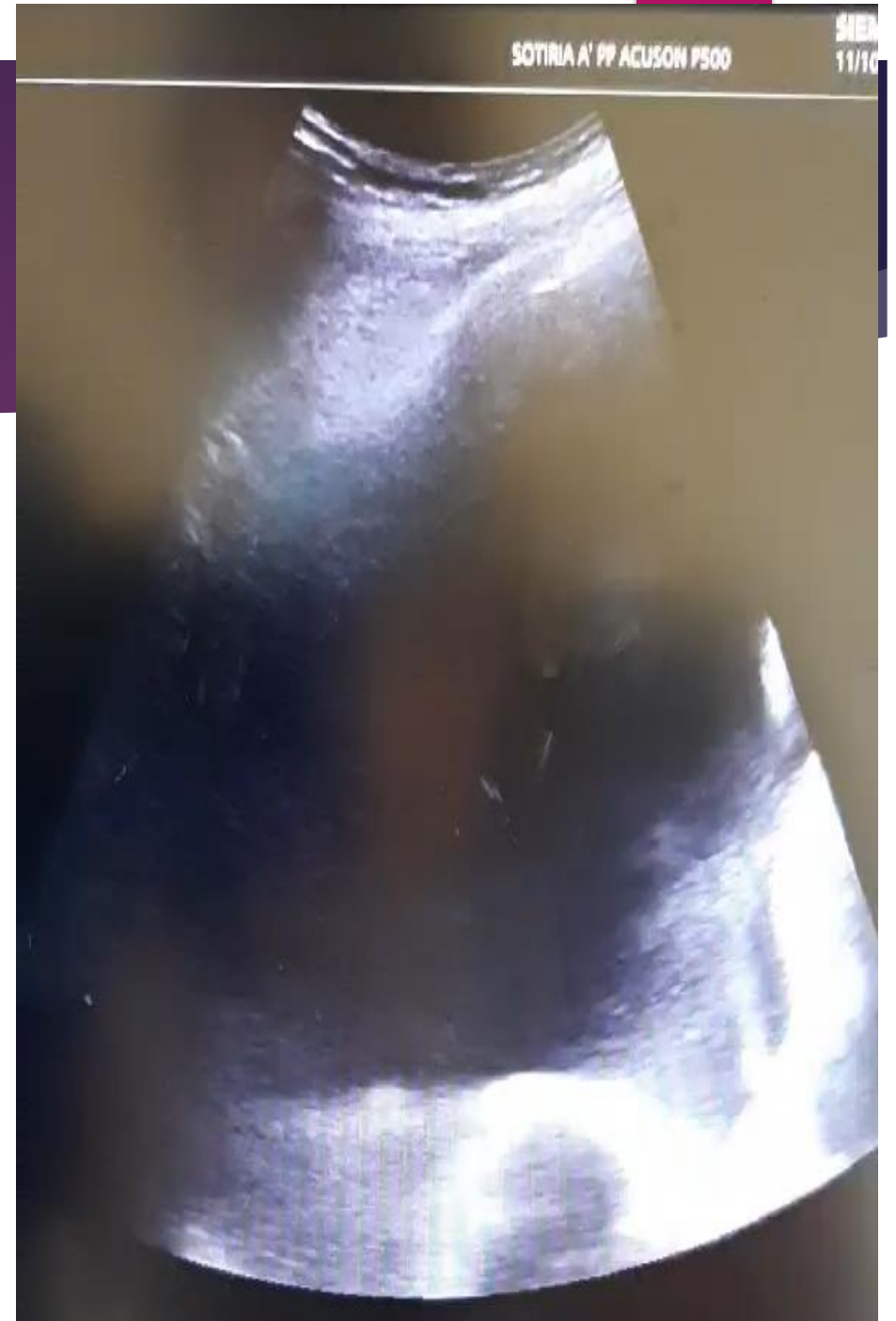


CASE 3



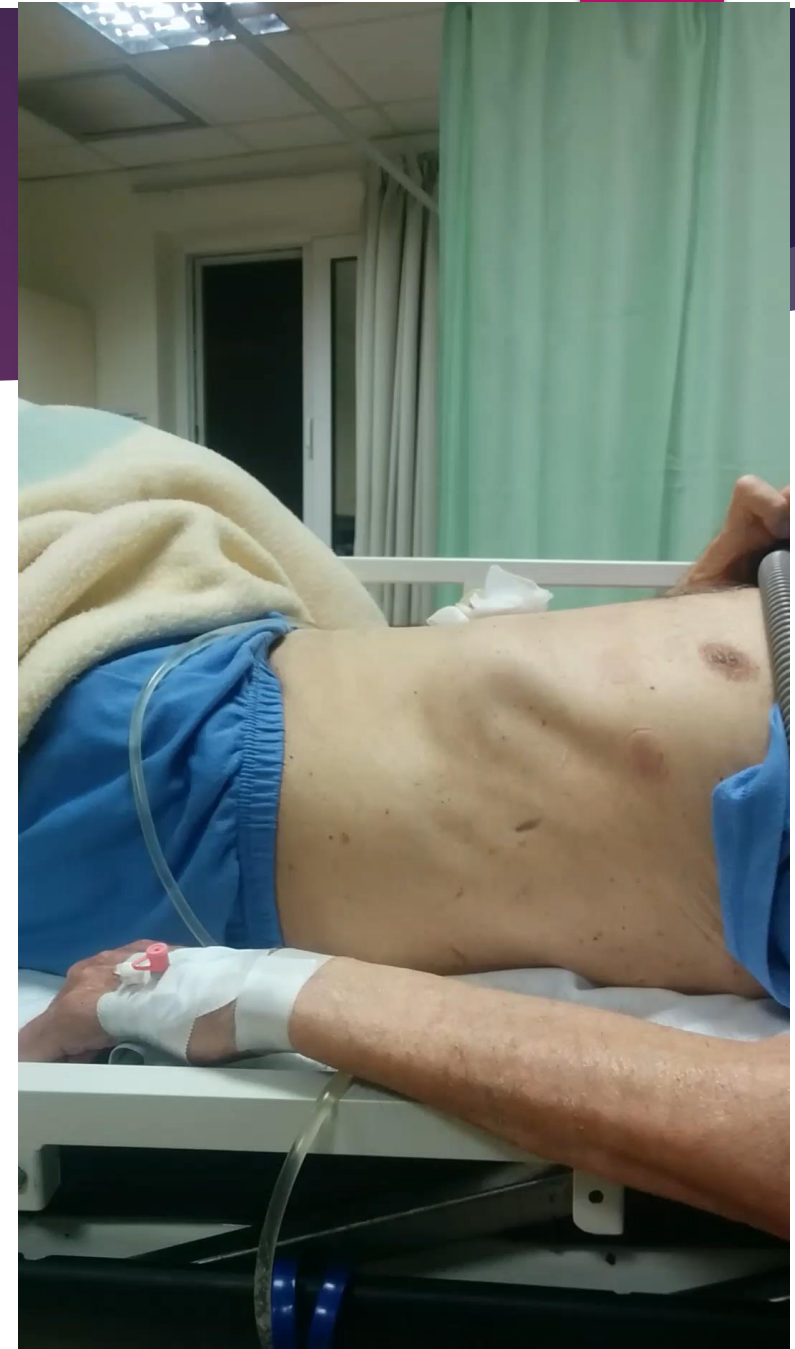
CASE 4

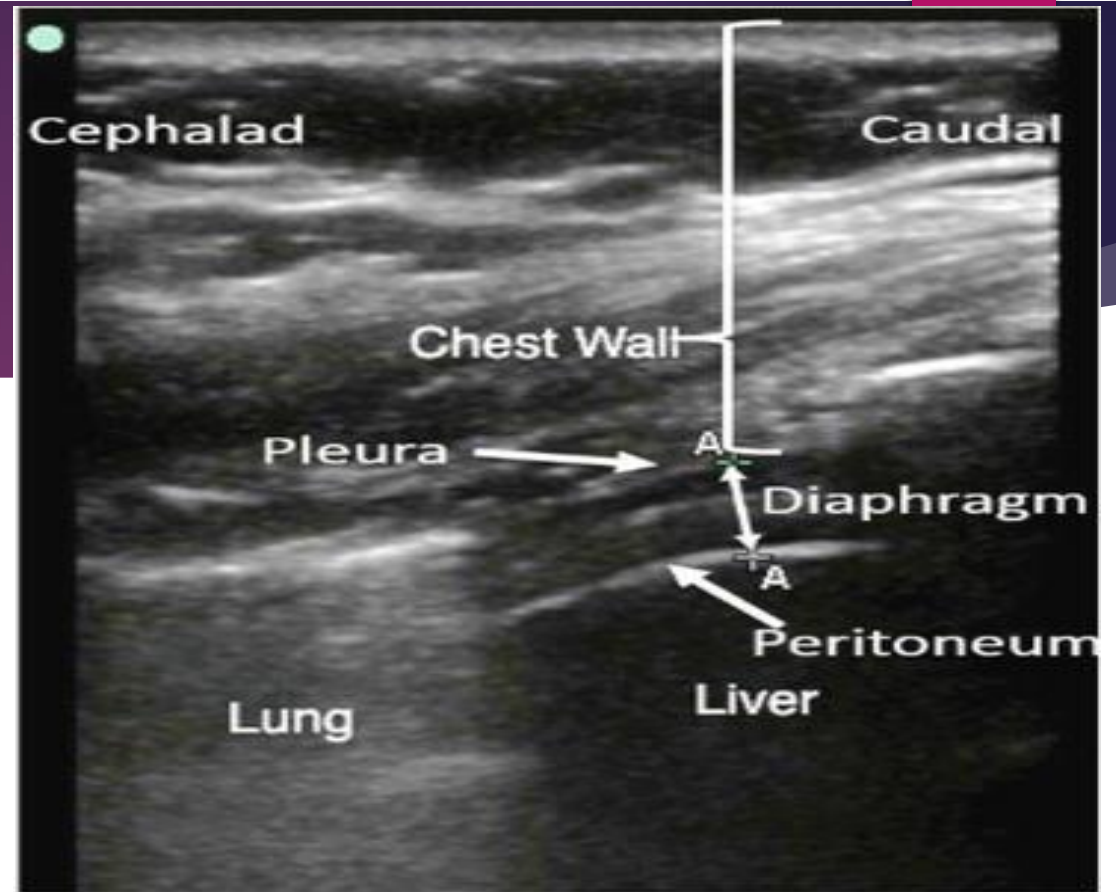
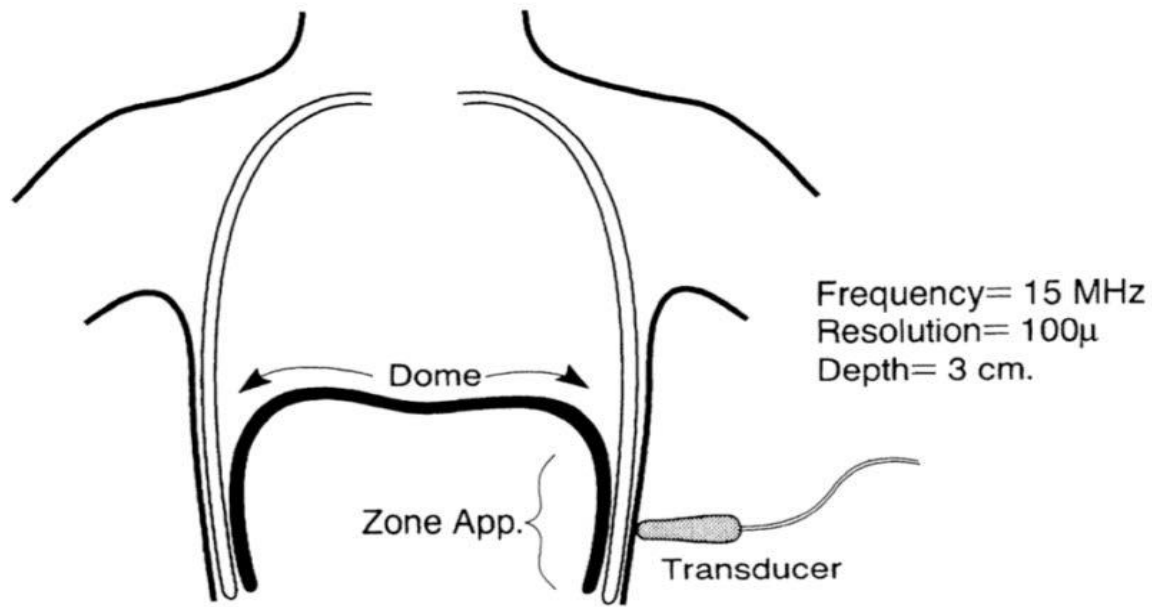
- ▶ ♀, 69, non smoker, Waldenström's macroglobulinemia with heart amyloidosis (2012). Dyspnoea on exertion for the past month. CT scan: Pleural Effusion on the right side.
- ▶ Pleural fluid paracentesis: Lymphocytic CD 3/ CD20 exudate with CD 138 Plasmacyte proliferation compatible with pleural involvement of primary disease.
- ▶ Possible multiple myeloma/ Lymphoma/ Plasmacytoma



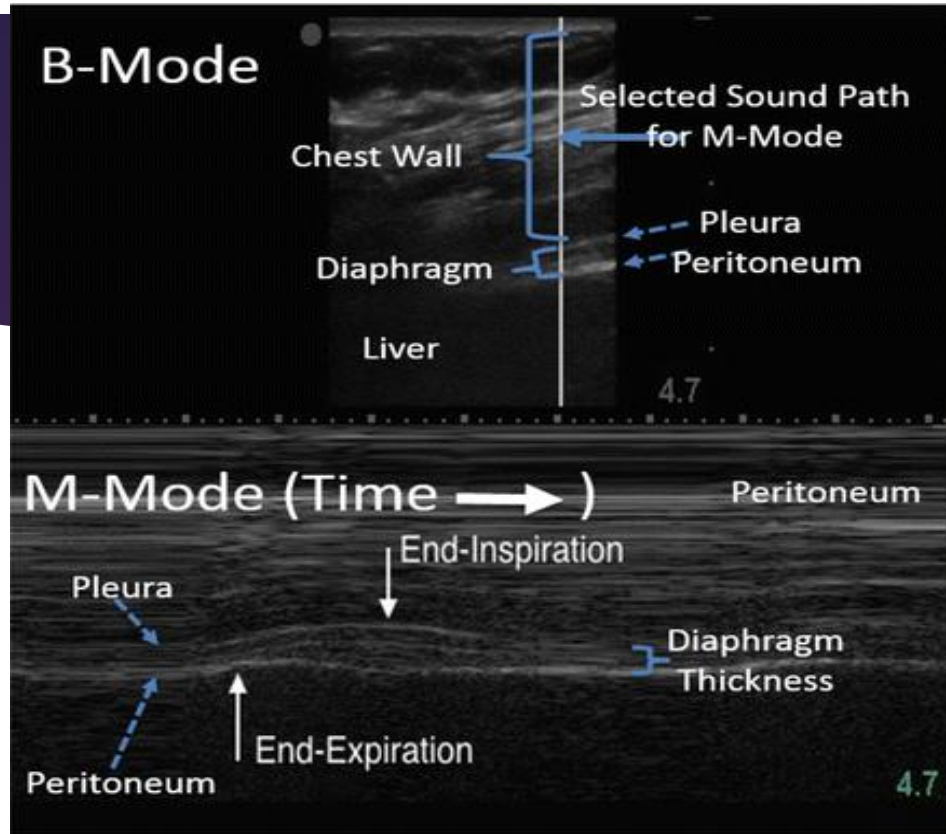
CASE 5

- ▶ ♂, 71, non smoker, lower and upper limb muscle pains and numbness and progressive muscle weakness for 1 year. Dyspnoea on exertion from the past 3 months, and orthopnoea for the last month. Difficulty of swallowing – gastrostomy. Recurrent aspiration pneumonias for the past 4 months.
- ▶ CXR: No abnormalities, ABGs: PO₂: 75 mmHg, PCO₂: 65 mmHg, PH: 7.34, HCO₃: 35 μmol.





When measuring diaphragm thickness and thickening fraction, the use of a linear, high-frequency probe is suggested. The probe is positioned in the sagittal-oblique position at the level of the zone of apposition, and image scanning begins at the mid-axillary line.



M-mode image of diaphragm thickening during inspiration. End-expiratory and end-inspiratory diaphragm thicknesses can be directly measured, (red arrows) and thickening fraction (TF) can be determined.



ΠΑΡΟΥΣΙΑΣΗ ΠΕΡΙΣΤΑΤΙΚΩΝ

NEKTARIOS ANAGNOSTOPOULOS
MD,PHD,MSC

ACADEMIC ASSOCIATE IN INTERVENTIONAL
PULMONOLOGY DEPARTMENT

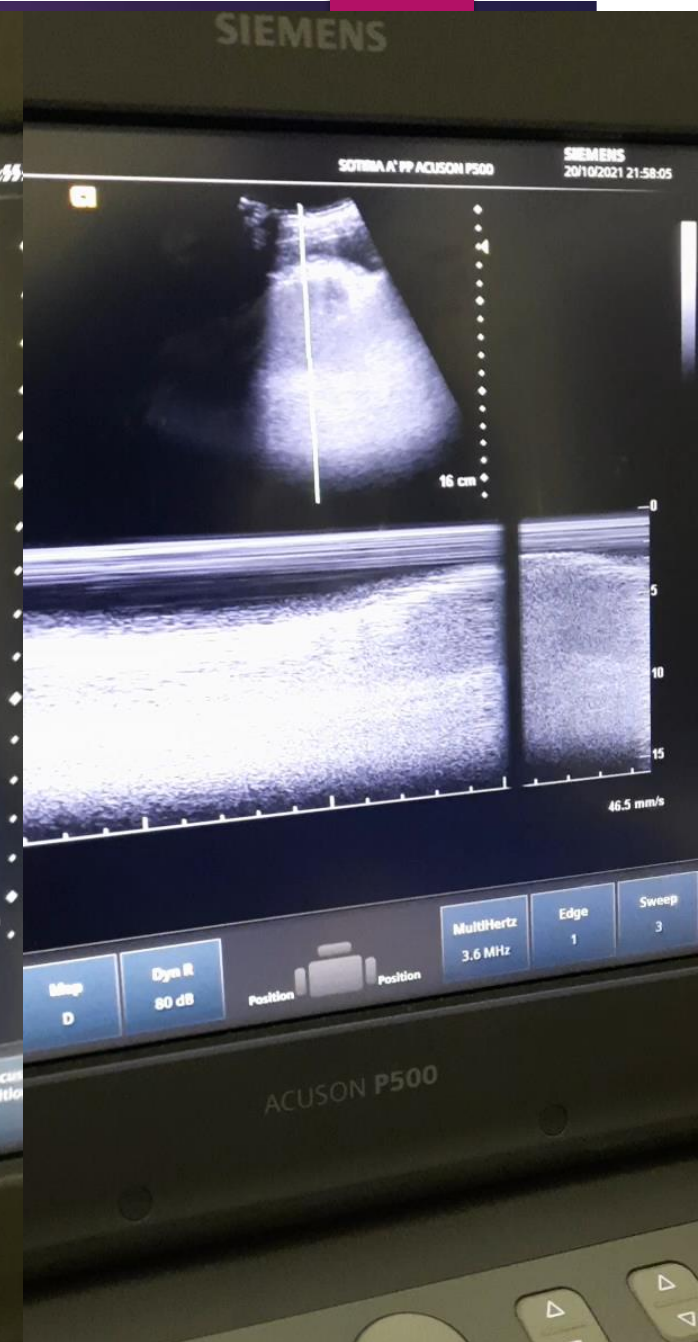
1ST RESPIRATORY CLINIC, UNIVERSITY OF ATHENS

'SOTIRIA' HOSPITAL

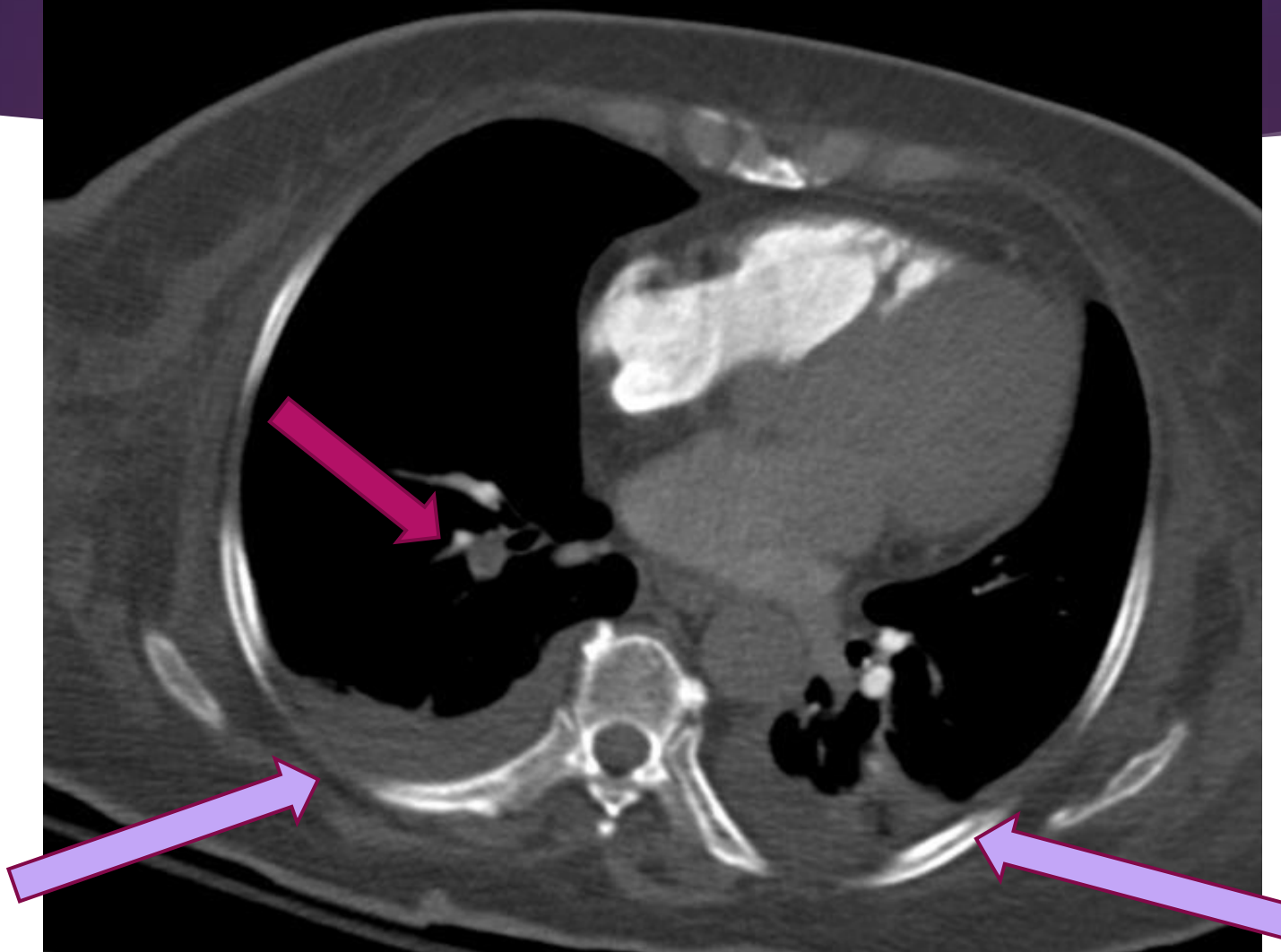


CASE 1

- ▶ ♂, 52, smoker, DM, AH, sudden onset of pleural chest pain, shortness of breath.
- ▶ CXR: No abnormalities, ABGs: PO₂: 56 mmHg, PCO₂: 32 mmHg, PH: 7.49, HCO₃: 21 μmol on room air. ECG : SR Tach, BP:140/60mmHg
- ▶ D-dimers: 2,34 (<0,50)

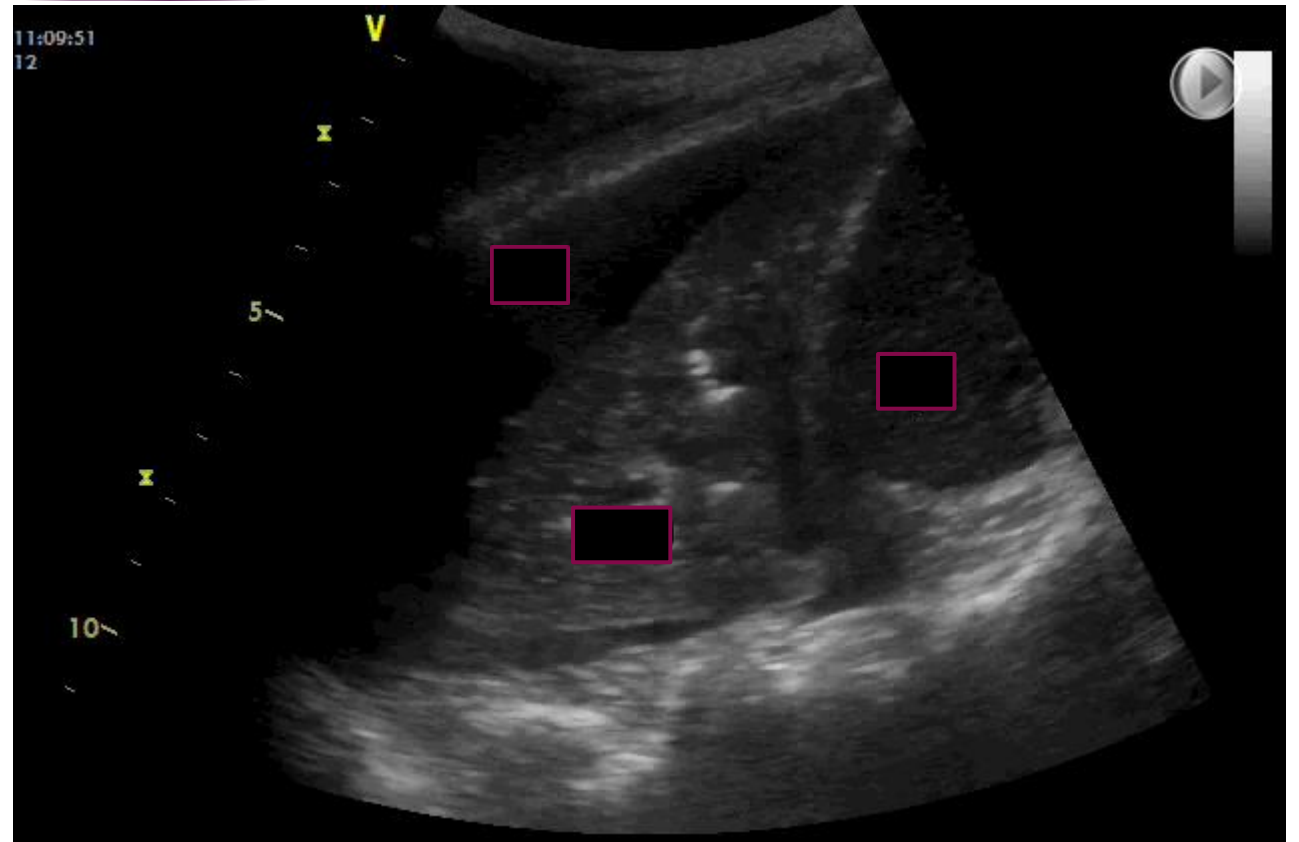


Warning: Not for diagnostic use



CASE 2

- ▶ ♀, 76, ex smoker, COPD, DM, TAVI, AH, fever 39,2° C for 3 days, cough, dyspnoea on exertion.
- ▶ CXR revealed consolidation on left lower lobe
- ▶ Admitted in hospital and received IV Ceftriaxone plus Moxifloxacin.

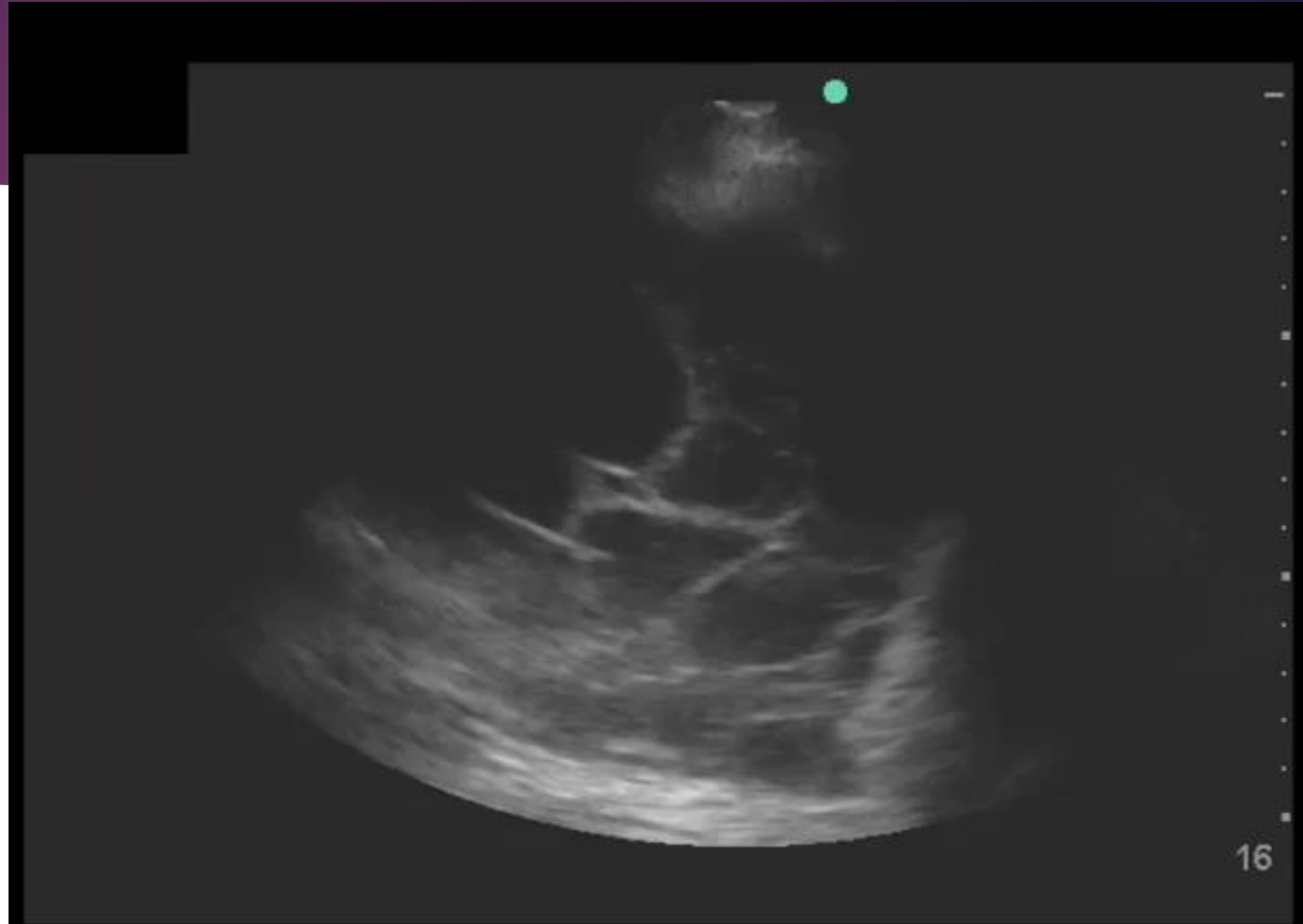


- After 72H developed left chest pain, relapse of fever
- CT scan revealed consolidation with air bubble sign on left lower lobe and mild to moderate pleural effusion



CASE 2

- ▶ Thoracentesis revealed a polymorphonuclear exudate with PH: 7,12, Glu: 22 mg/dl, LDH: 1300, Pro: 4,5 gr.
- ▶ A 32G thoracic tube was inserted with insufficient drainage in the first 24h,
- ▶ Intrapleural Alteplase fibrinolysis was performed

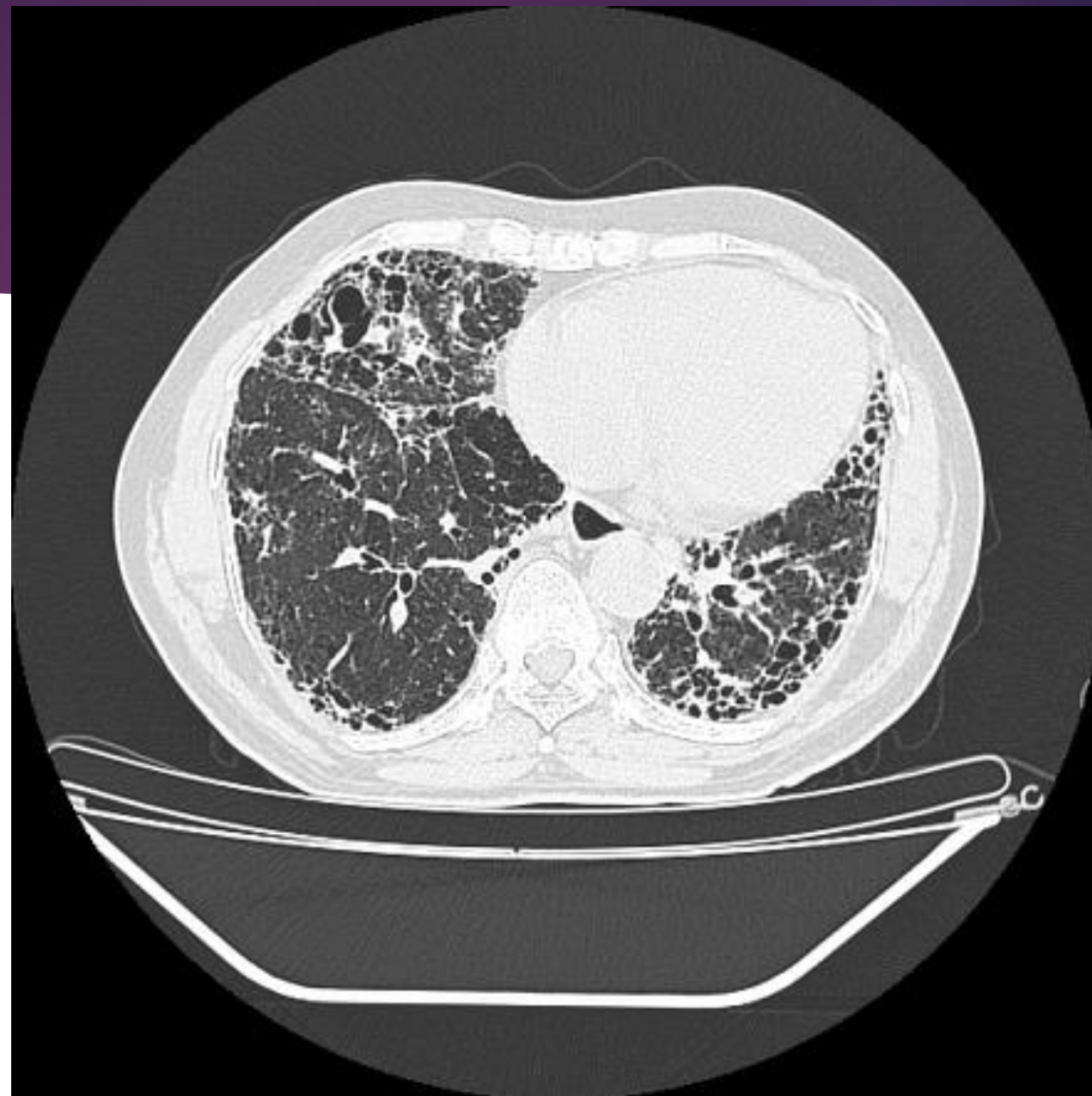


CASE 2

- ▶ After 24h repeat U/s was performed.
- ▶ Patient remained afebrile and discharged after 3 days with oral antibiotics.



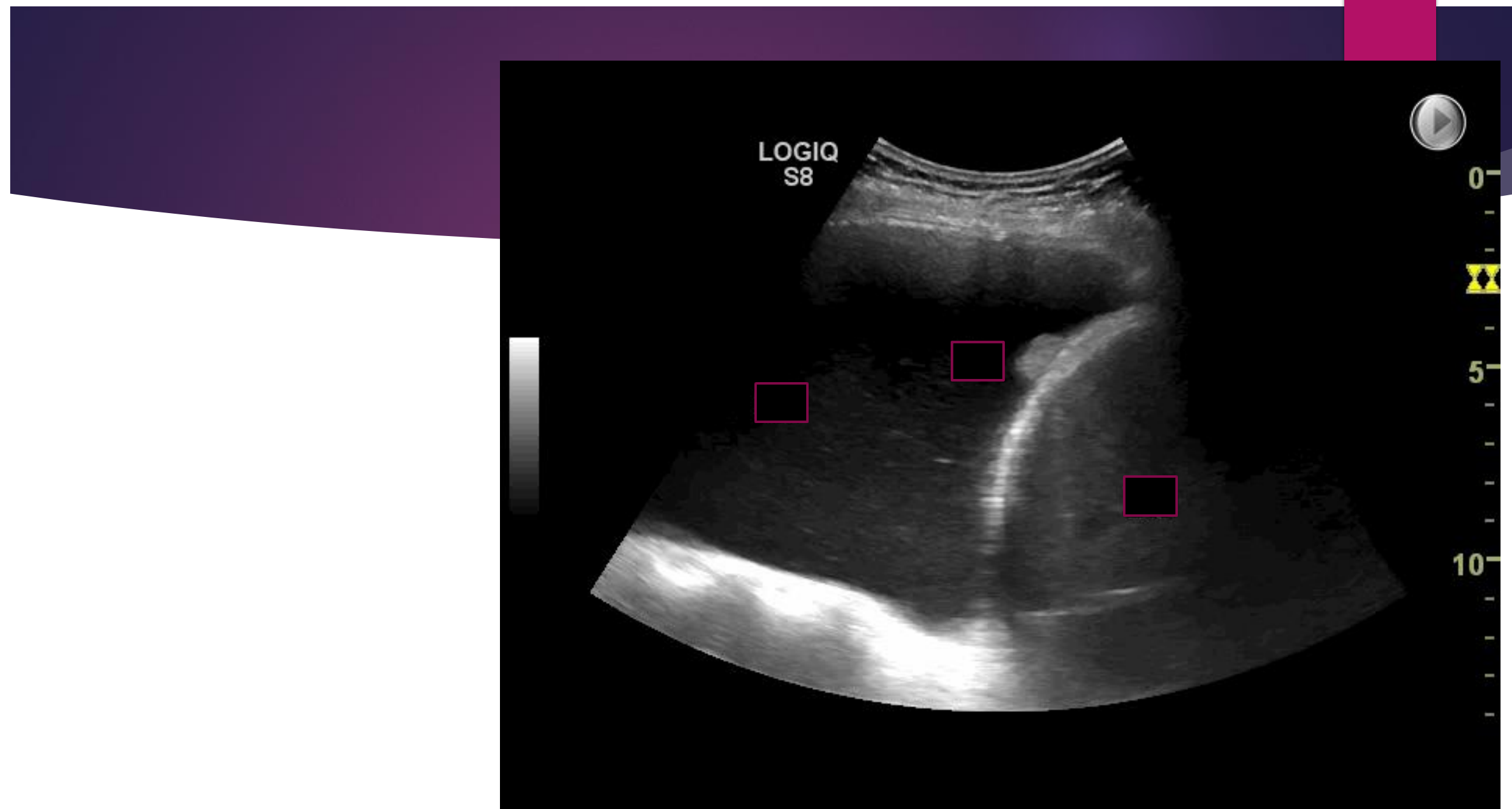
CASE 3



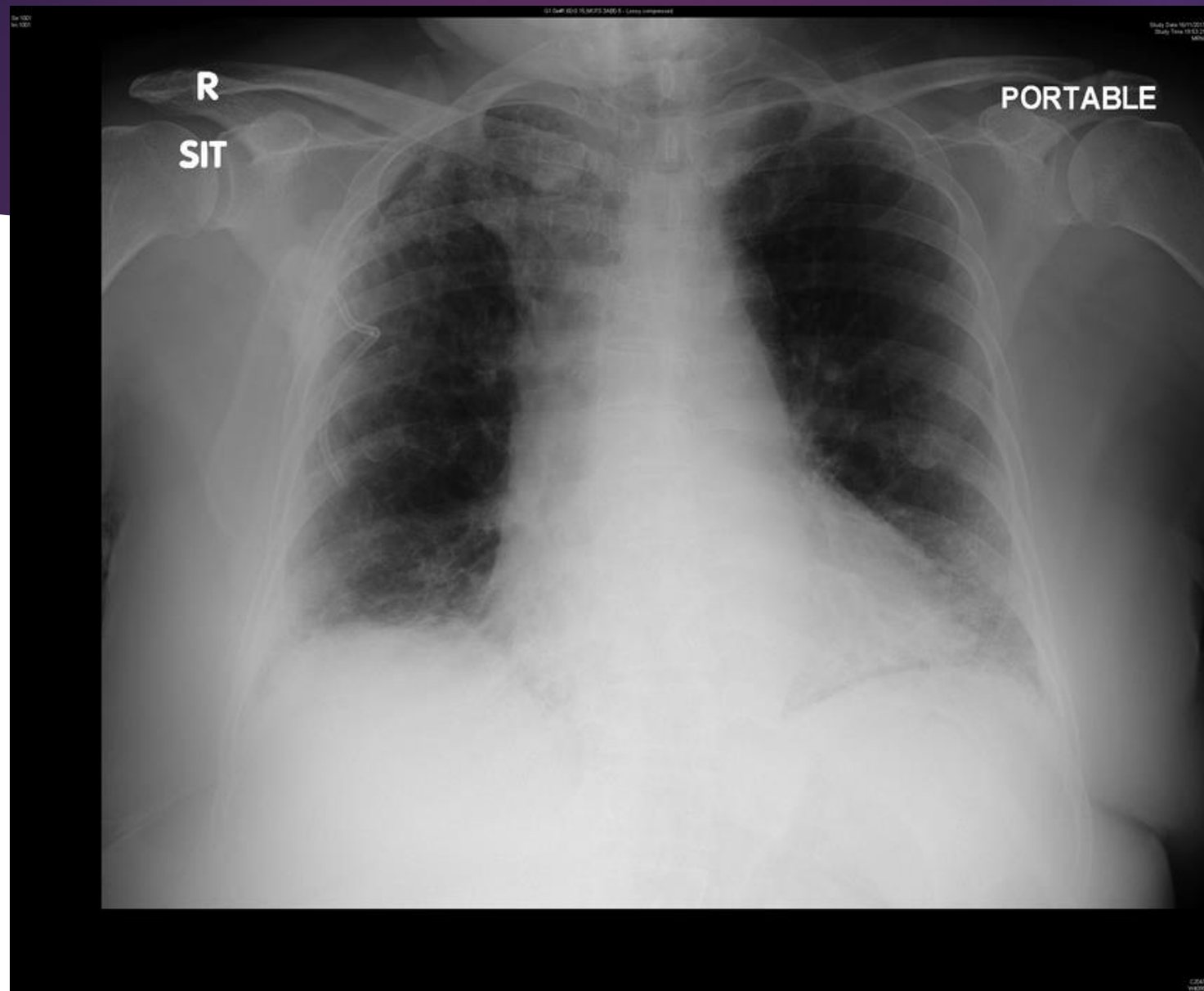
CASE 4

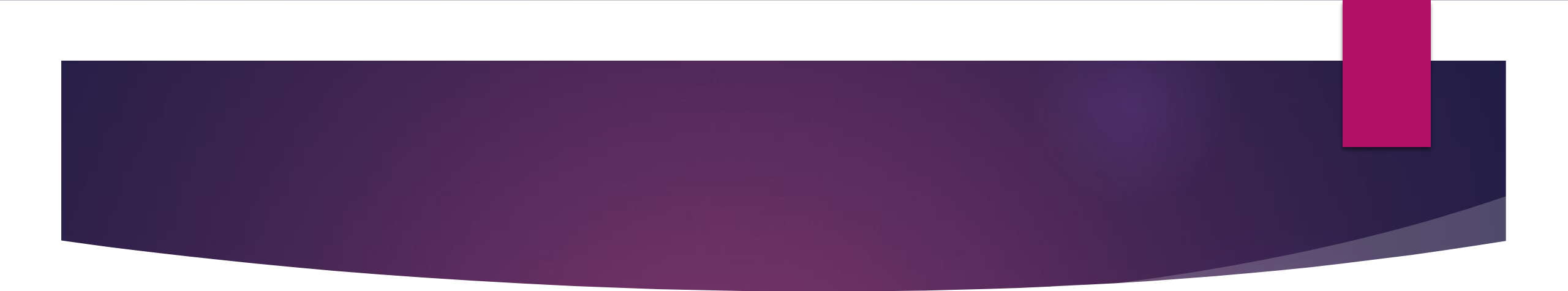
- ▶ ♂, 72, ex smoker 80py, AH, DM, shortness of breath Mmrc:3-4 for two weeks.
- ▶ CT scan showed a massive right sided pleural effusion with atelectasis of the right lung and bulky disease of subcarinal region with possible pressure on the RMB.





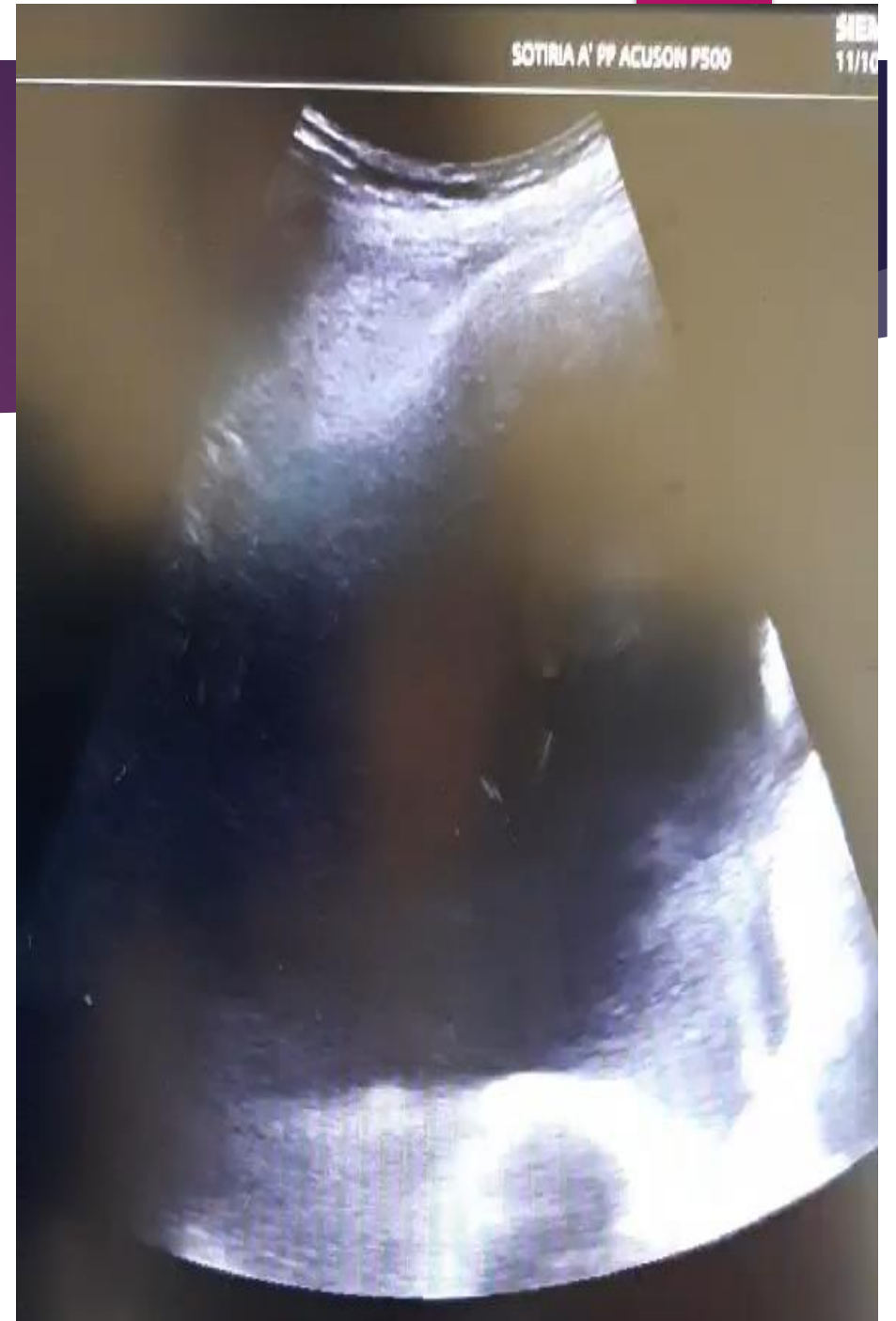




- 
- ▶ NSCL of EBUS TBNA on LNs 7 (TTF1 (+) , in favour of Adenocarcinoma
 - ▶ Brain CT positive for single metastasis 1,3cm
 - ▶ Abdomen CT negative for metastasis
 - ▶ Plural fluid cytology positive for Adenocarcinoma

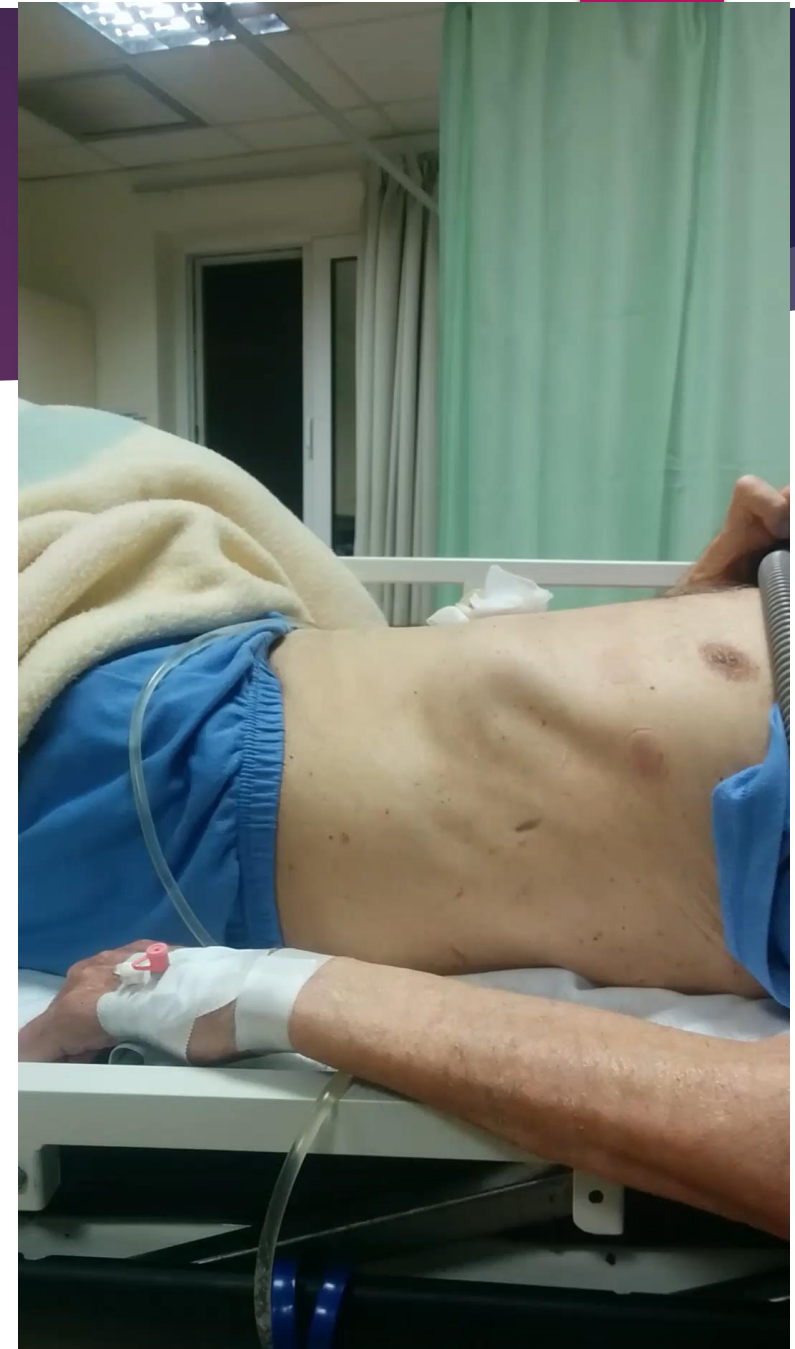
CASE 5

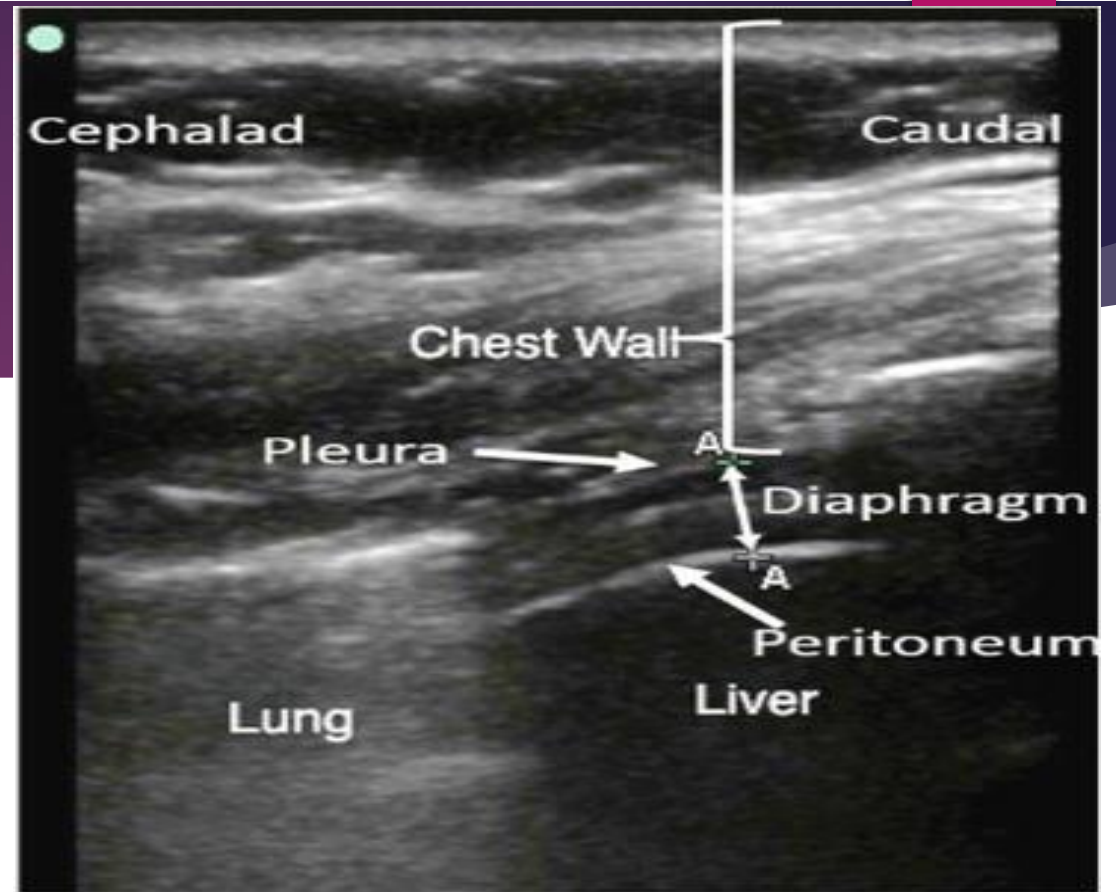
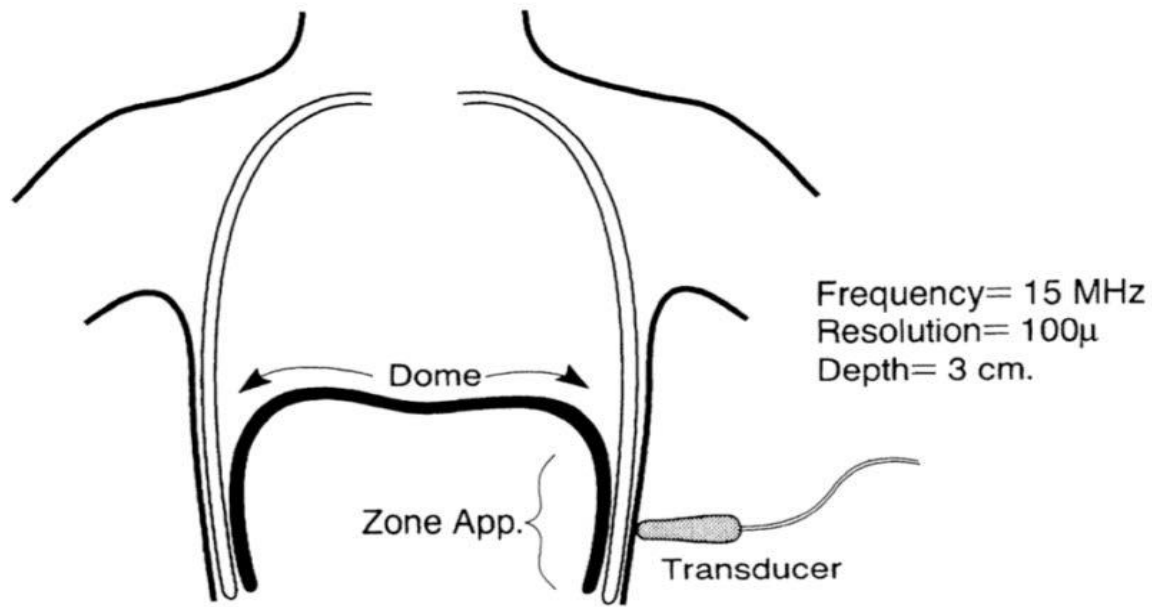
- ▶ ♀, 69, non smoker, Waldenström's macroglobulinemia with heart amyloidosis (2012). Dyspnoea on exertion for the past month. CT scan: Pleural Effusion on the right side.
- ▶ Pleural fluid paracentesis: Lymphocytic CD 3/ CD20 exudate with CD 138 Plasmacyte proliferation compatible with pleural involvement of primary disease.
- ▶ Possible multiple myeloma/ Lymphoma/ Plasmacytoma



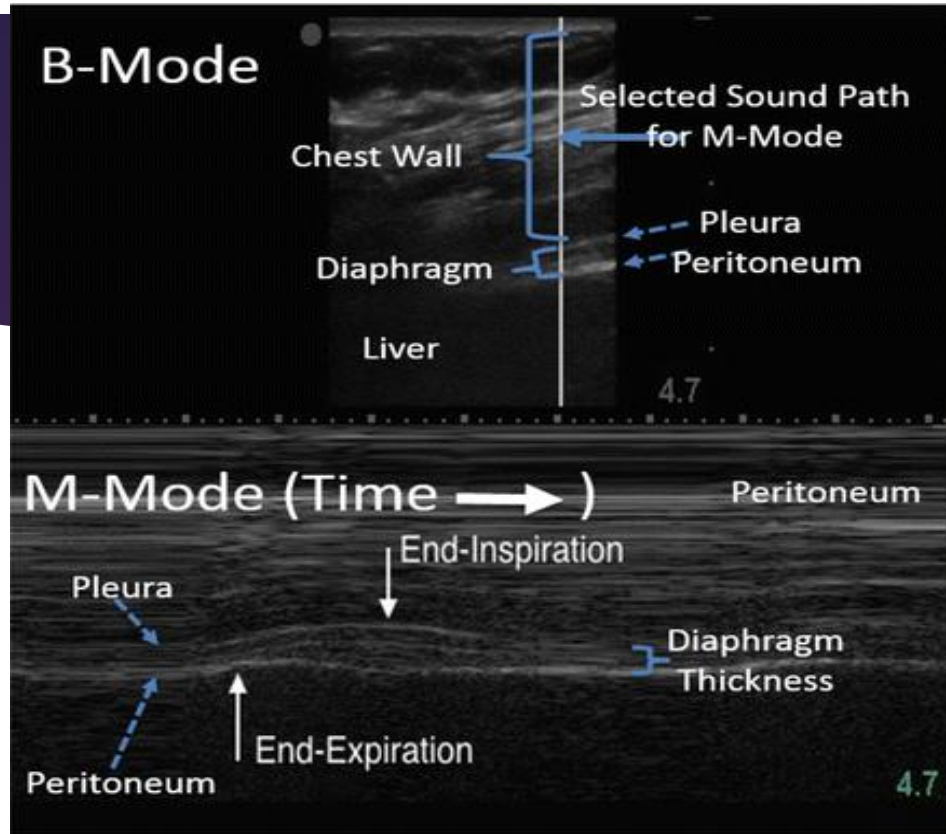
CASE 6

- ▶ ♂, 71, non smoker, lower and upper limb muscle pains and numbness and progressive muscle weakness for 1 year. Dyspnoea on exertion from the past 3 months, and orthopnoea for the last month. Difficulty of swallowing – gastrostomy. Recurrent aspiration pneumonias for the past 4 months.
- ▶ CXR: No abnormalities, ABGs: PO₂: 75 mmHg, PCO₂: 65 mmHg, PH: 7.34, HCO₃: 35 μmol.





When measuring diaphragm thickness and thickening fraction, the use of a linear, high-frequency probe is suggested. The probe is positioned in the sagittal-oblique position at the level of the zone of apposition, and image scanning begins at the mid-axillary line.



M-mode image of diaphragm thickening during inspiration. End-expiratory and end-inspiratory diaphragm thicknesses can be directly measured, (red arrows) and thickening fraction (TF) can be determined.

$$DTf\% = (DTi - DTe) / DTe \times 100$$

Cut-off value > 25-30%

PPV>90% for successful weaning

