

Pleural disease in Covid-19 era

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In the Covid era..

We can't do what we used to do and we aren't sure of what we can do!

- Current clinical management pathways inappropriate
- In-patient bed shortages expected with escalation

Many questions...

- Pleural involvement in Covid-19?
- Is pleural fluid infective?
- Should we or Should we not - Diagnostic procedures?
- Therapeutic procedures?
- Precautions during and after procedures
- Drains - ICD's, PigTails, IPC's

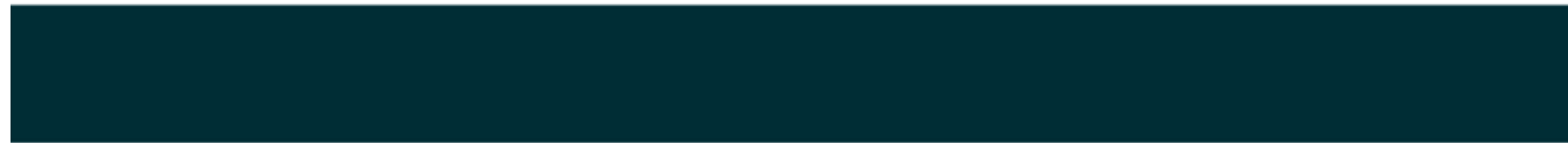
Evidence lacking!

Best practice recommendations

Goals

- Establish new clinical pathways for appropriate management
 - Benign conditions
 - Malignant conditions (suspected/confirmed)
- Minimise hospital visits - empower to self-manage
- Ensure HCW safety

Guidance document



British Thoracic Society Guidance on Respiratory Follow Up of Patients with a Clinico-Radiological Diagnosis of COVID-19 Pneumonia


Postpone

- Benign
 - Mild / tolerable symptoms
 - Benign pleuritis, benign asbestos pleural disease
- Malignant
 - Suspected Mesothelioma
 - Co-morbidities or PS - precludes chemotherapy

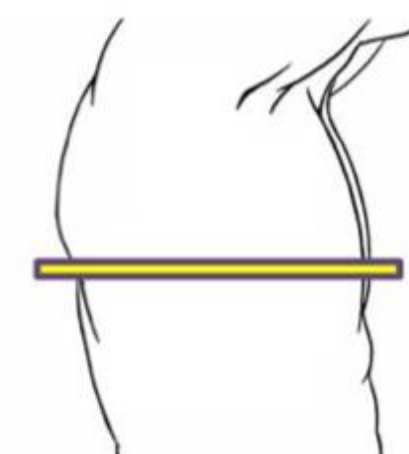
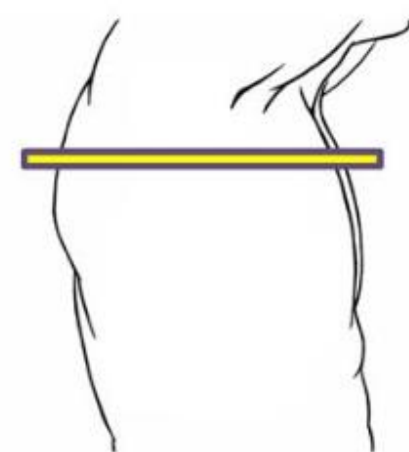
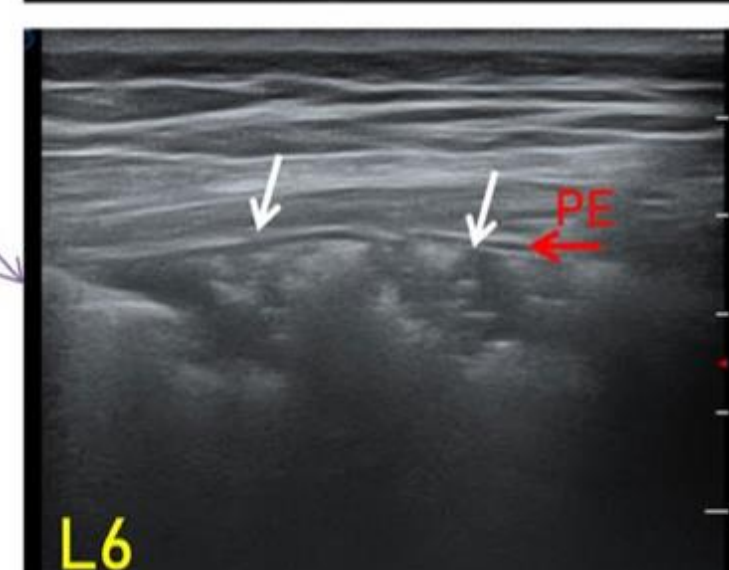
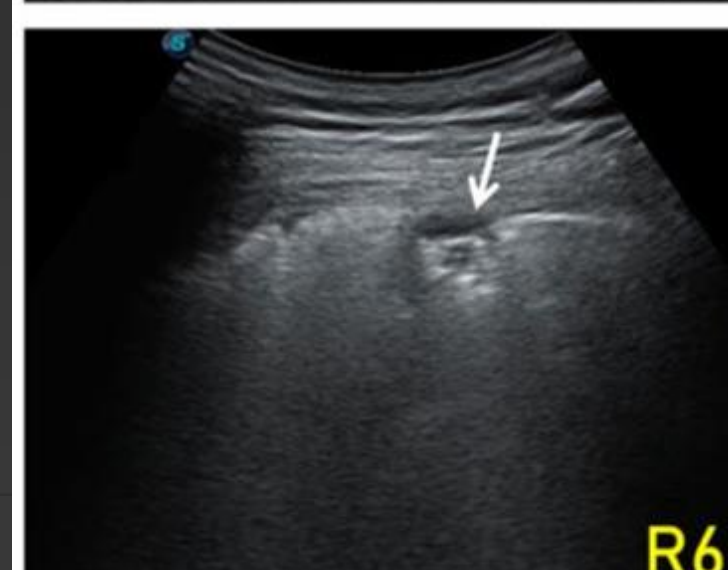
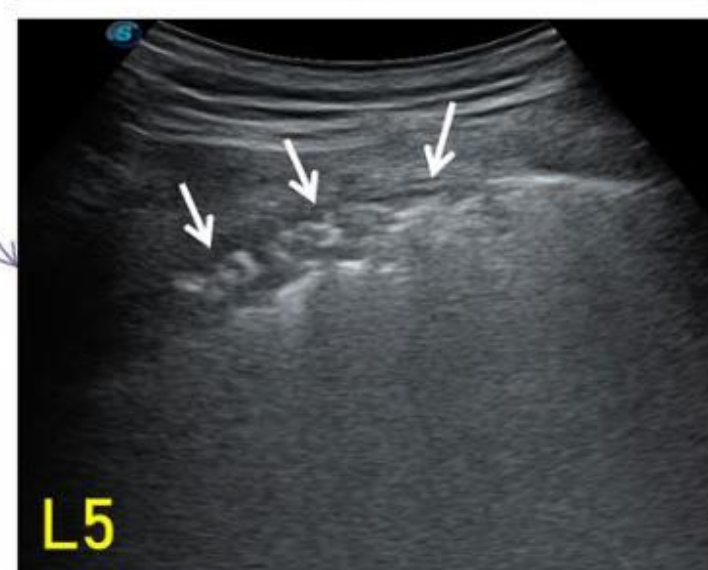
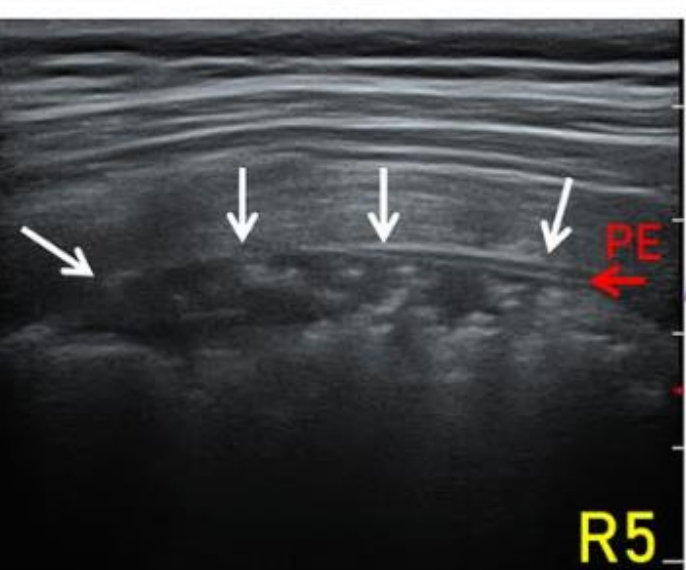
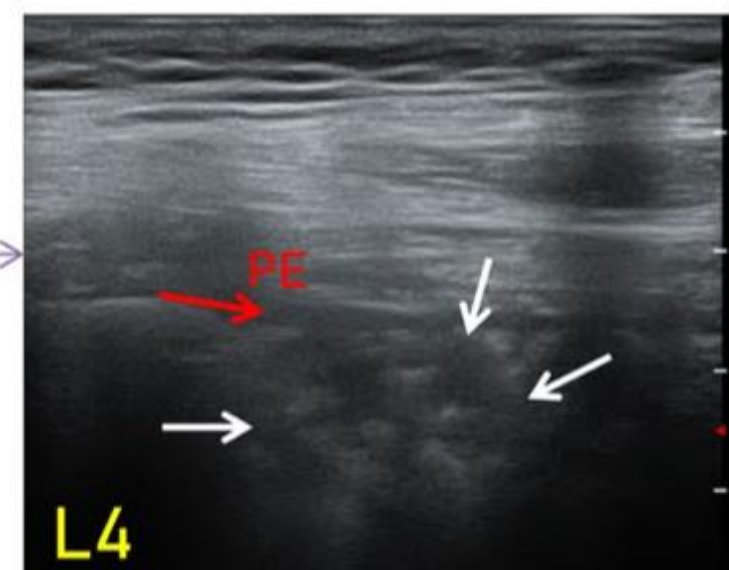
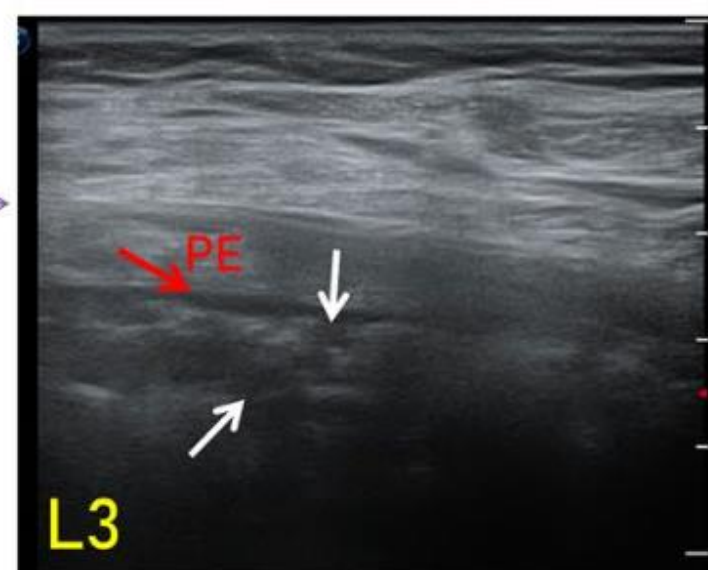
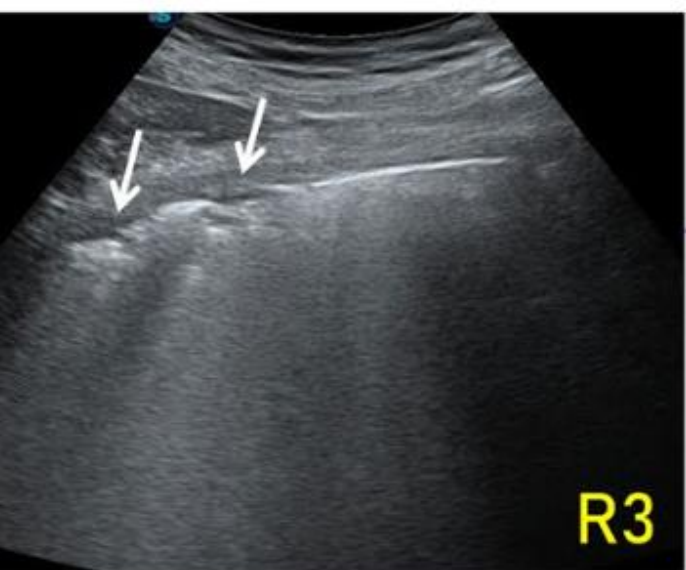
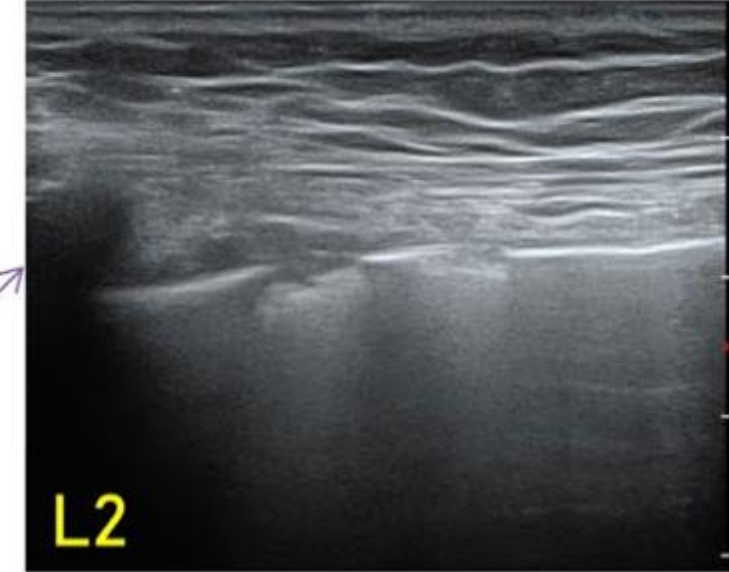
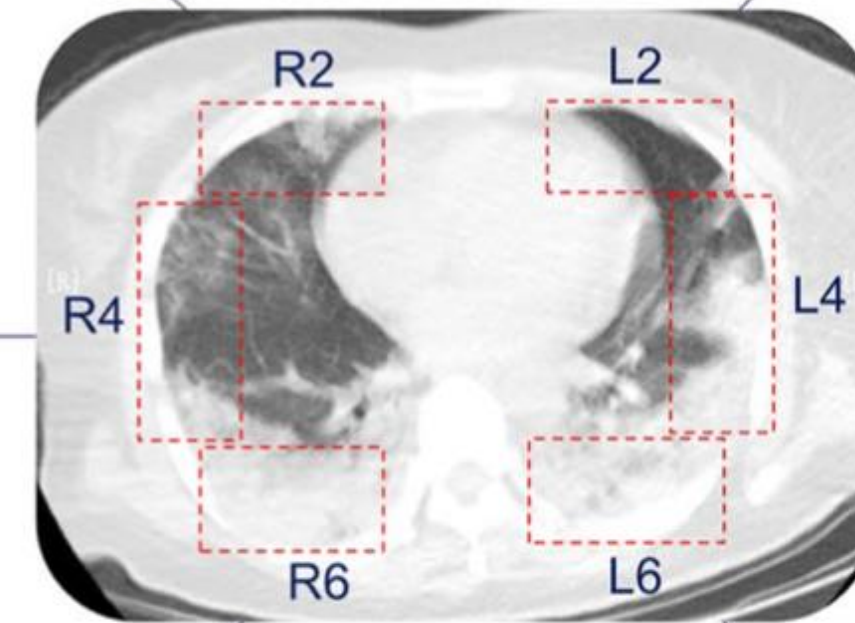
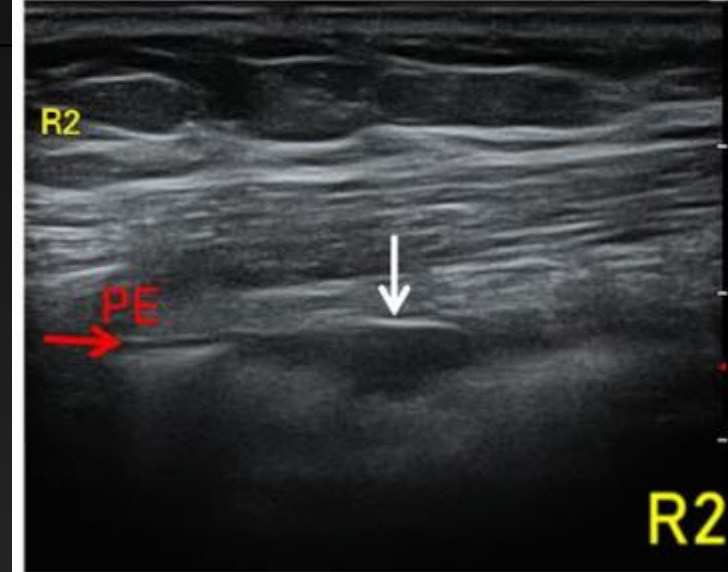
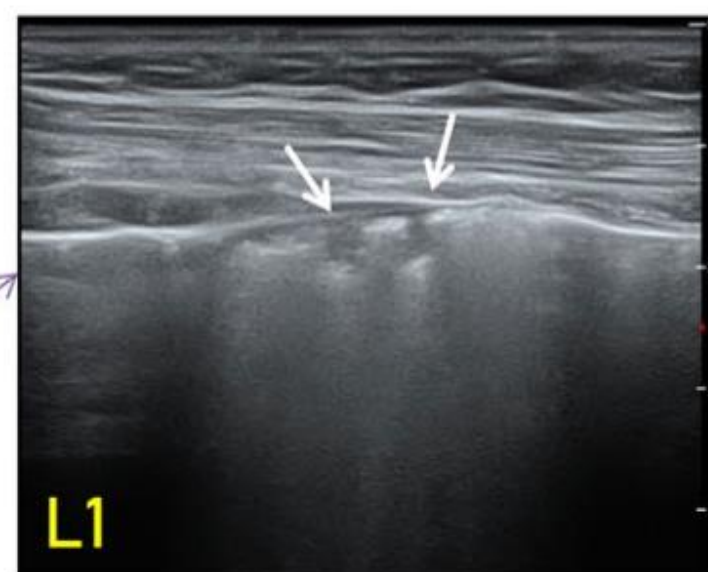
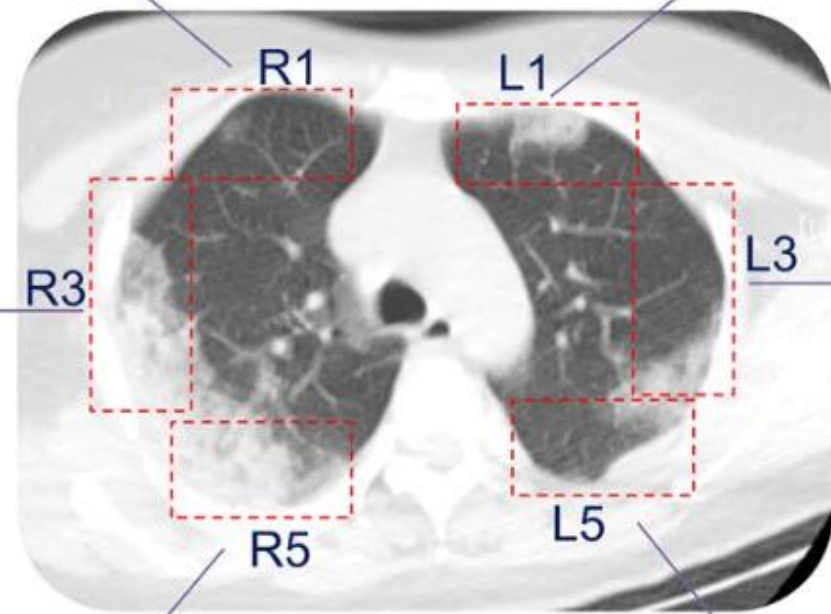
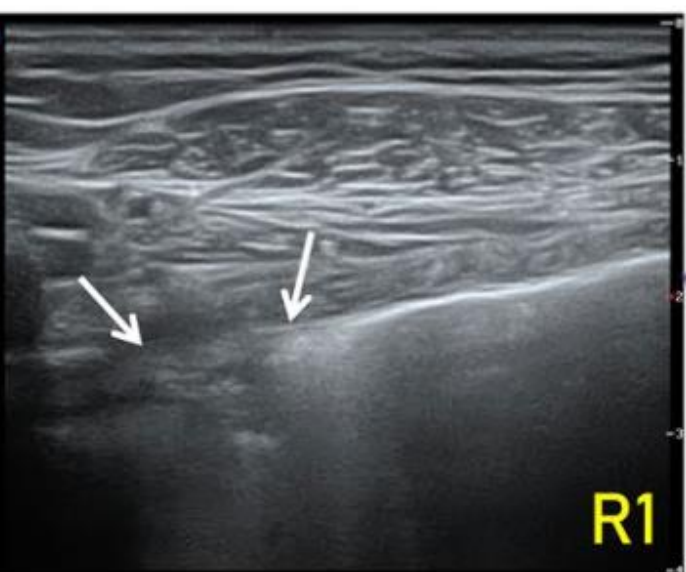
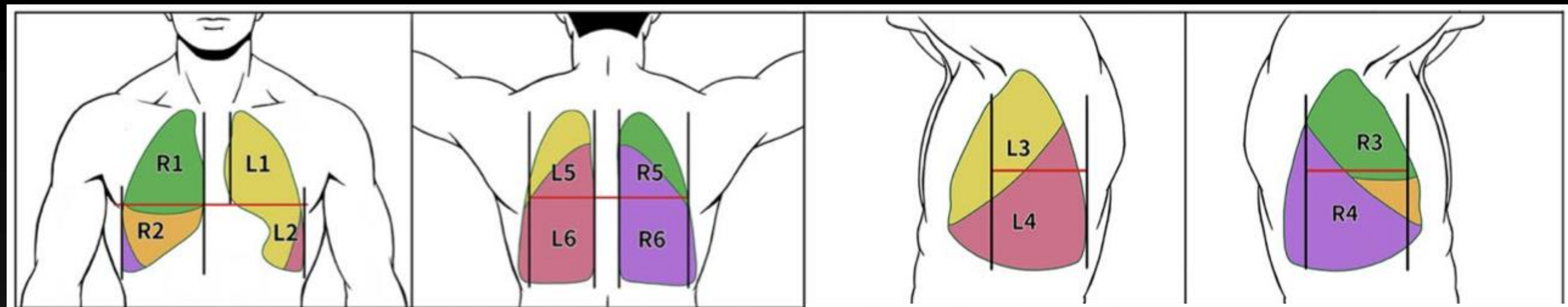
POCUS

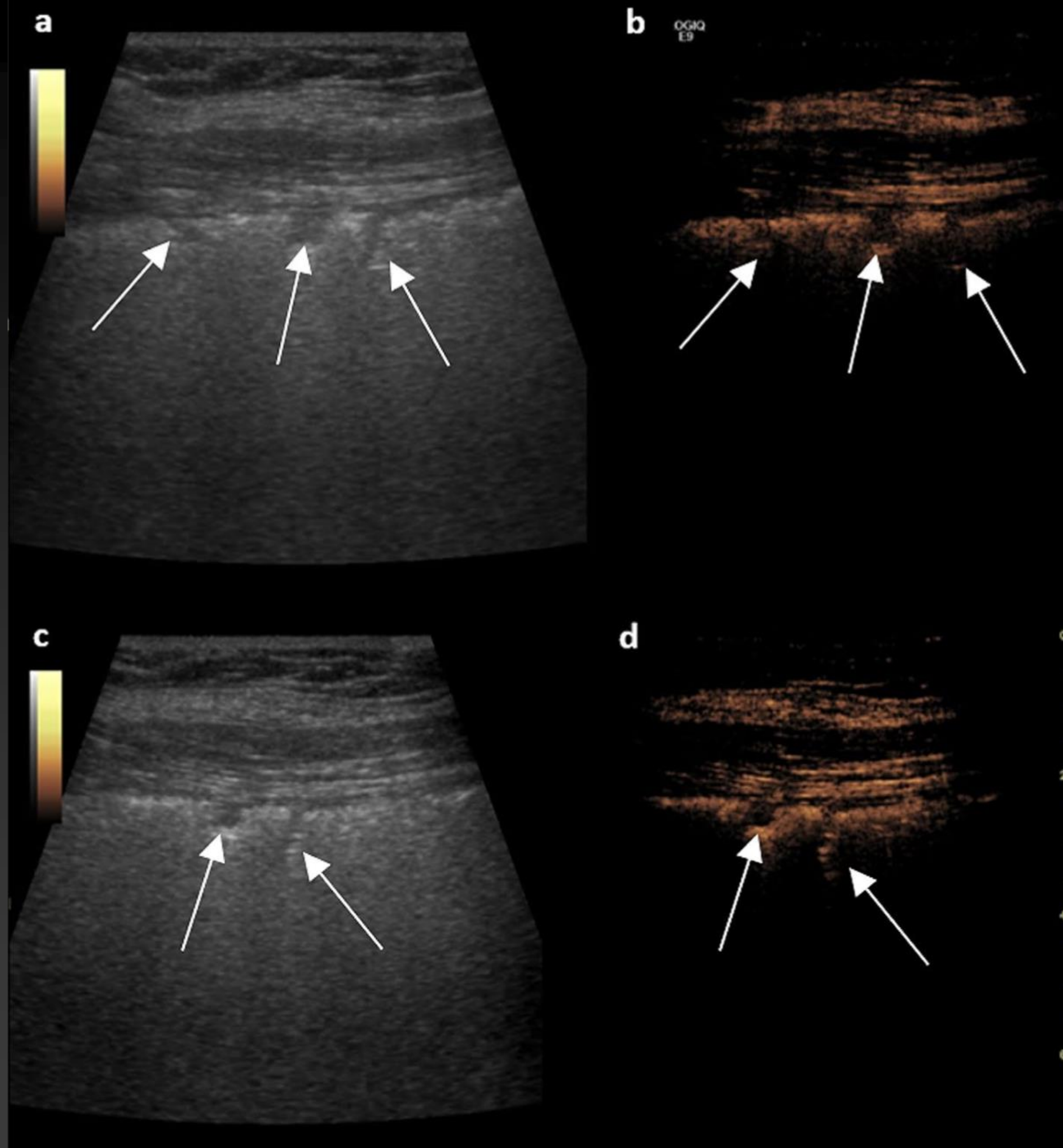
Point of care Ultrasound

Lung ultrasonography versus chest CT in COVID-19 pneumonia: a two-centered retrospective comparison study from China

Yong Yang¹, Yi Huang², Feng Gao³, Lijun Yuan^{1*} and Zhen Wang^{3,4*} 

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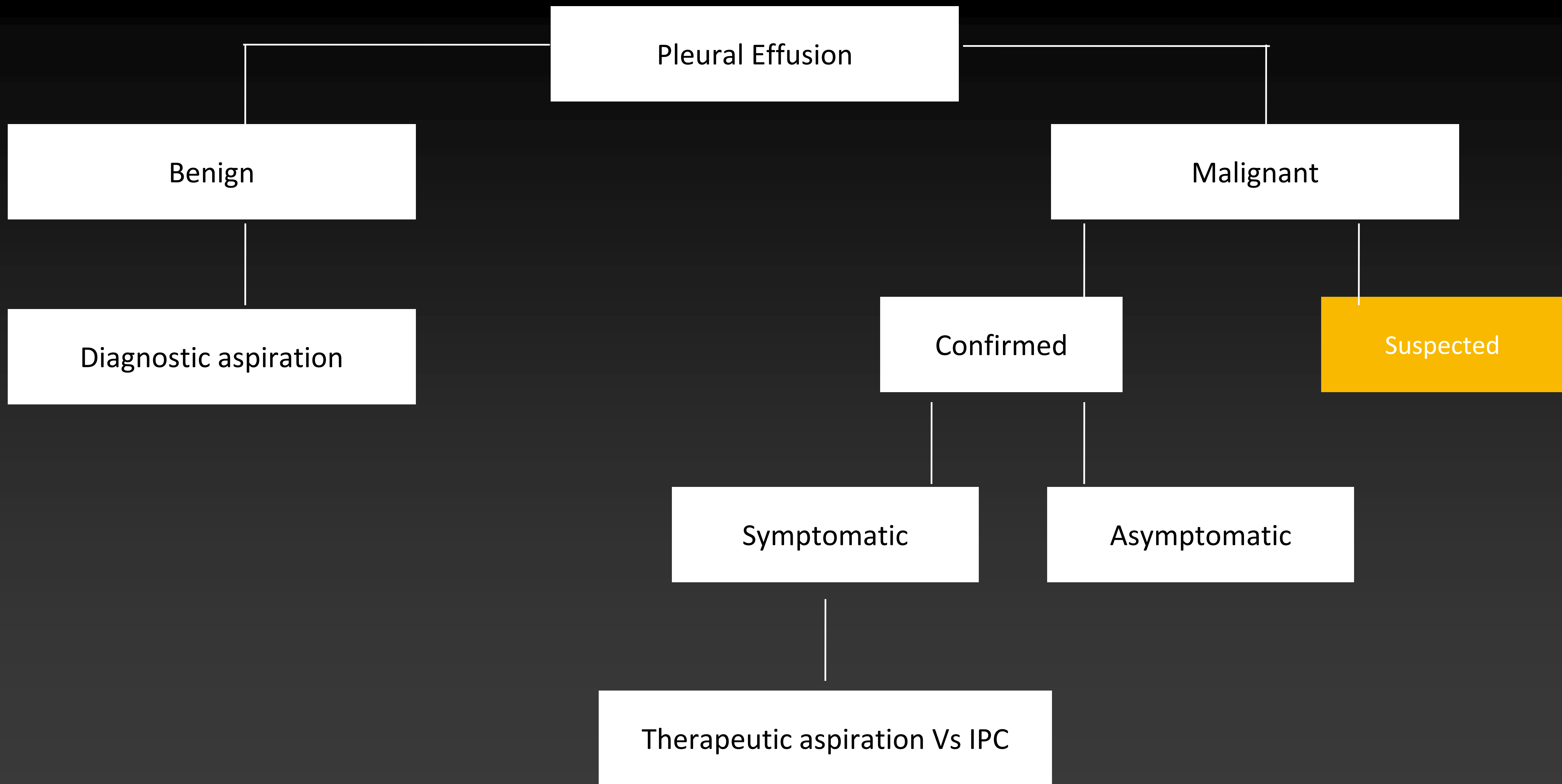


CEUS

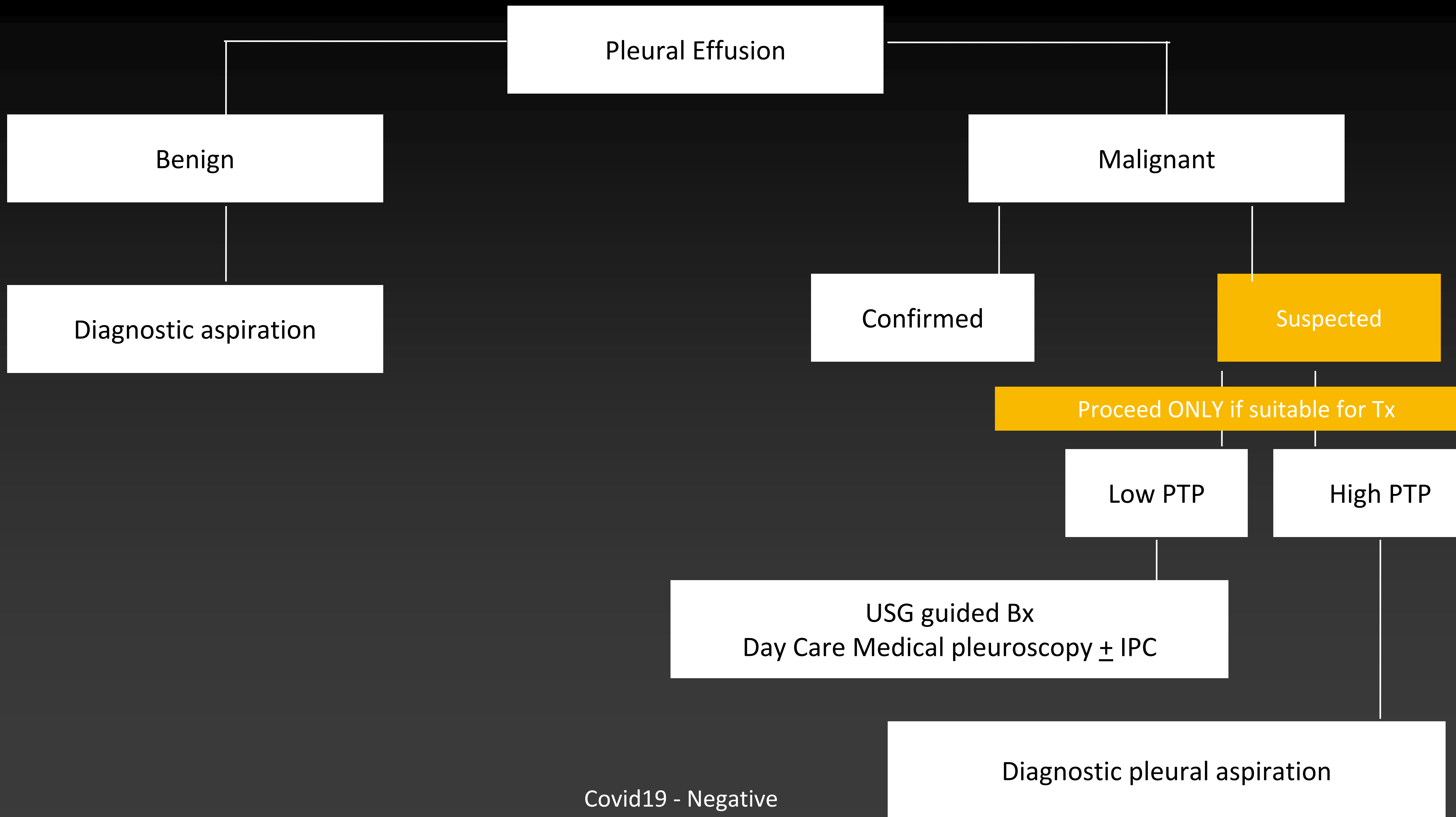
Non-enhancing subpleural areas which correspond to areas of infarction measuring 3–5 mm
Similar findings are present in all zones

Mx of Pleural Effusion

- Effusion a atypical feature of Covid19 - minimal and bilateral
- USG >> CT
- What we don't know...
 - Virus detection in pleural fluid
 - rRT-PCR of pleural fluid



Covid19 - Negative



Mx of Pleural Effusion

- Dare care management suggested
- Avoid slurry
- Train to drain
 - Same day
 - Twice weekly IPC drainage
- Multiple procedures - same day

Pleural procedures

New symptoms consistent with
Covid19 or Unknown

Symptoms due to underlying
disease process

Delay procedure
Manage as Covid19

Aerosol Generating Procedure AGP
Level 2 PPE recommendation
Pleural fluid - Category 3 pathogen

Manage appropriately

rRT-PCR for Covid19

Positive

Negative

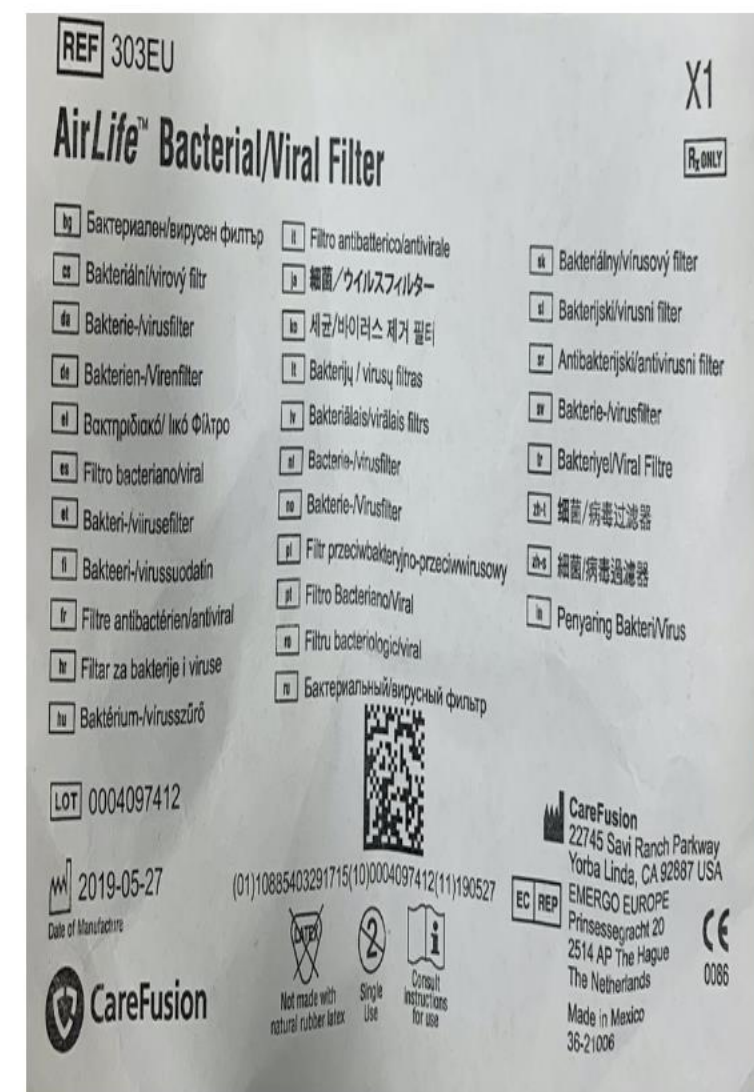
Pneumothorax

Pneumothorax not reported a Covid19 feature

- Outpatient Mx in those minimally symptomatic
- Small bore drains (?valves)
- Self isolation recommended
- Air-leak / non-expanding lung - in-patient care

Drains

- Considered aerosol generating
- Closed circuit preferred - attach to wall suction 5cmH₂O
- Digital drains with filter
- Self isolation recommended



Courtesy: Dr Liberman Moishe, Dr Chakravarty Reddy

HCW

- Pleural procedures - considered aerosol generating procedures
- Level 2 PPE recommendation
 - FFP-3 Mask, Long-sleeve gown, gloves and eye protection
- Pleural fluid - Category 3 pathogen - handle like TB samples
- Maximise outpatient Mx - remote assessment of symptoms, device troubleshooting, empowering self-management of drains
- Involve RT's in care

Management based on...

Positive for Covid19

Suspected / unknown for
Covid19

Benign

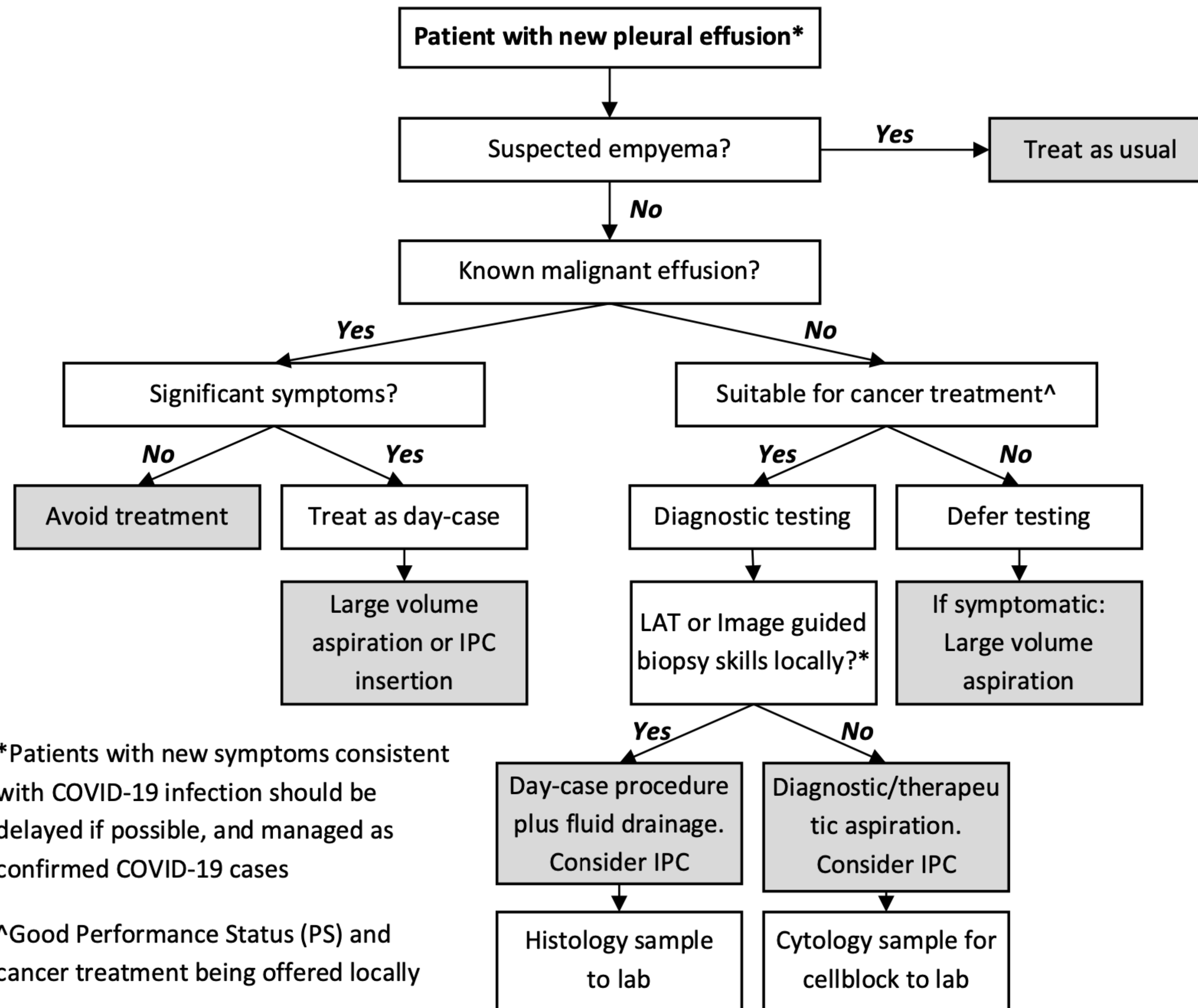
Malignant

Symptomatic

Asymptomatic



Thank you



*Patients with new symptoms consistent with COVID-19 infection should be delayed if possible, and managed as confirmed COVID-19 cases

^Good Performance Status (PS) and cancer treatment being offered locally

LAT: Local Anaesthetic Thoracoscopy

Send sample to lab as Cat 3 pathogen