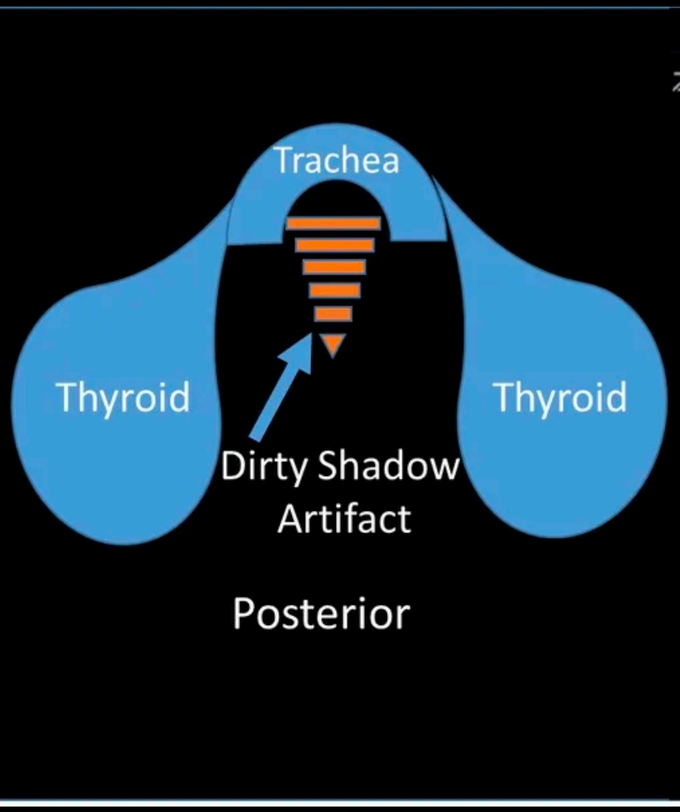
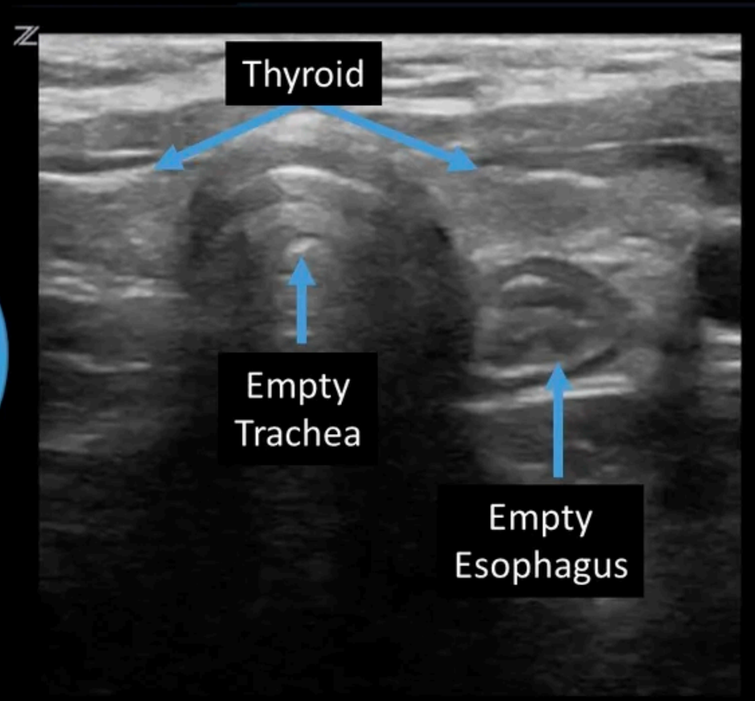
POCUS FOR ETT PLACEMENT

Guidance and confirmation

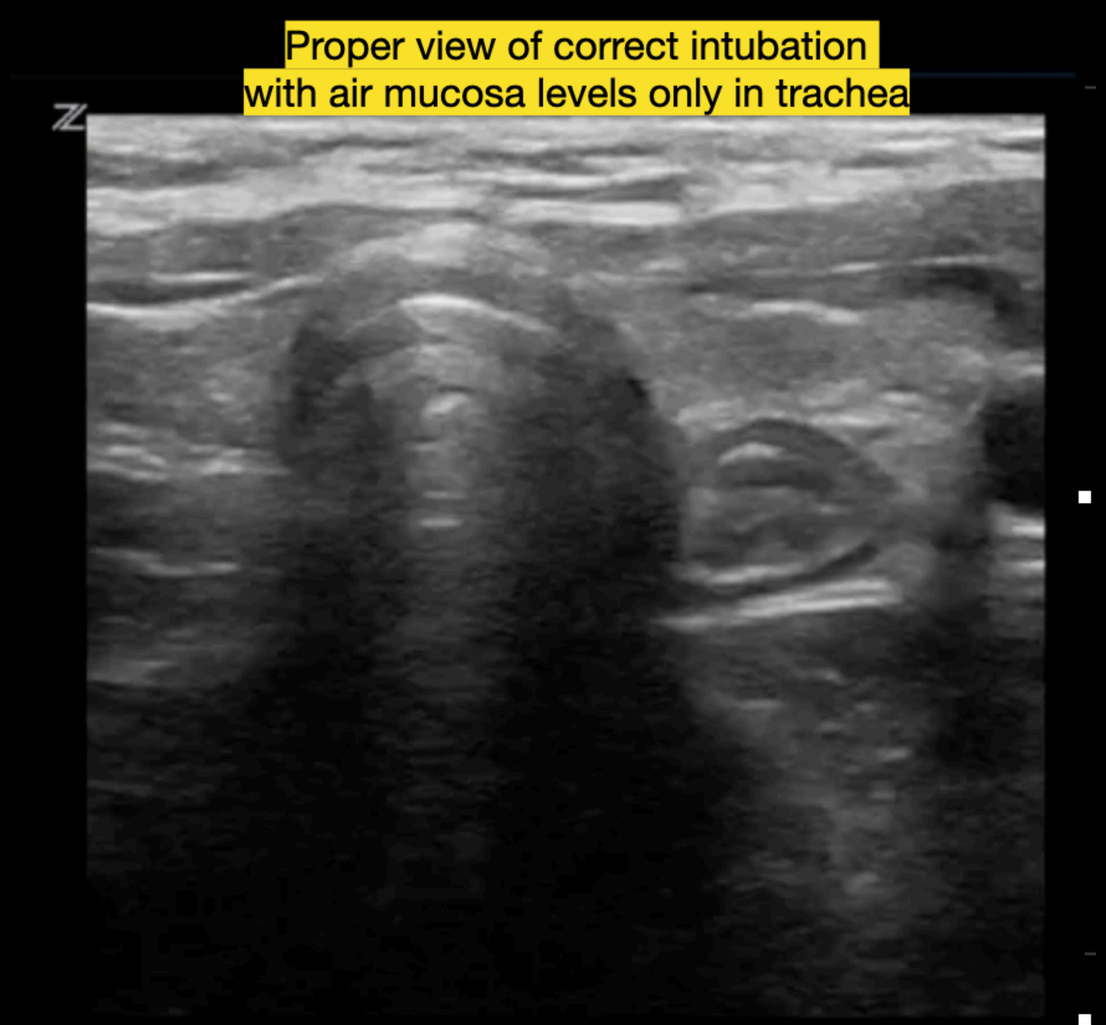
AIRWAY ANATOMY AND PROBE PLACEMENT

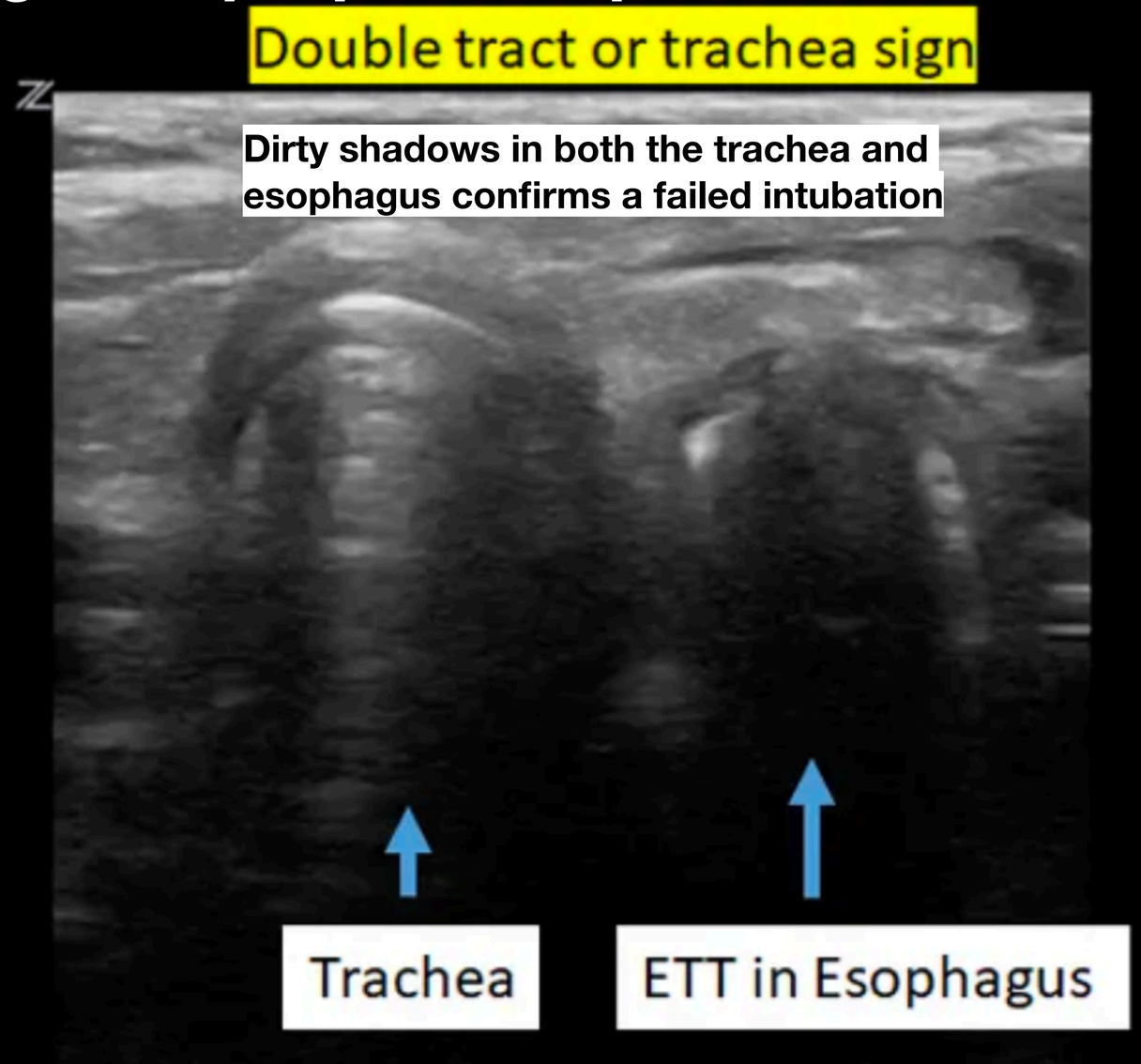




DIRECT CONFIRMATION

Double tract or double trachea sign =improper ETT placement

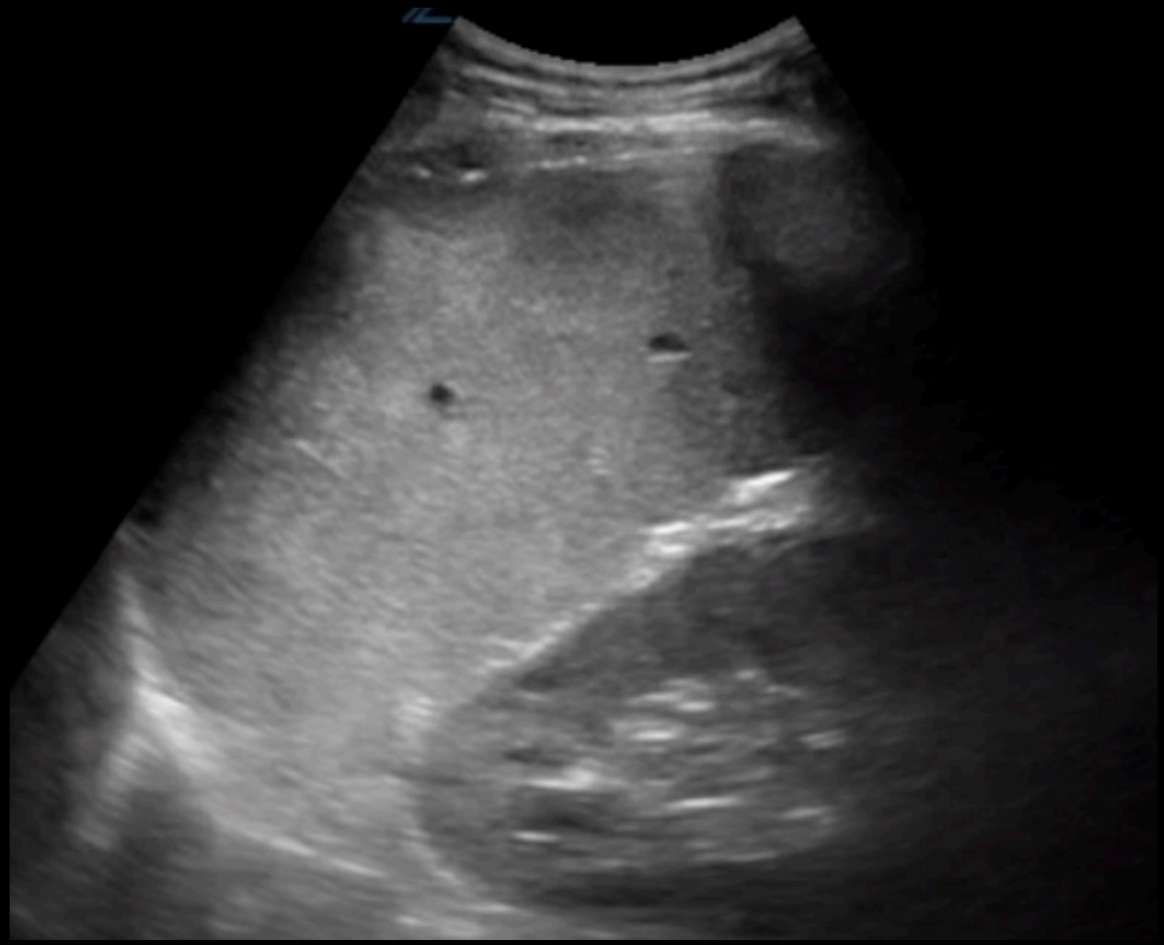




INDIRECT CONFIRMATION

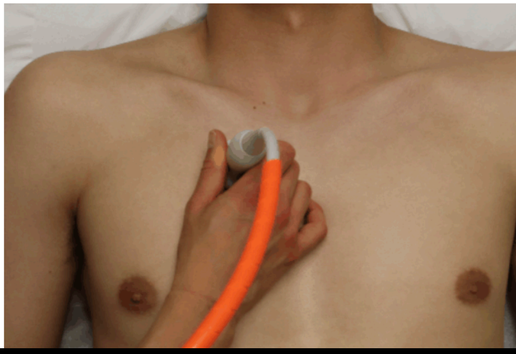
Diaphragm movement

- Go to fast view: RUQ or LUQ
- Visualize movement of diaphragm during PPV breaths
  - If moving caudal (—->,) proper placement of ETT
  - If moving cephalic (<—-), esophageal placement of ETT. With each breath, air enters into the abdomen causing diaphragm to move towards the head

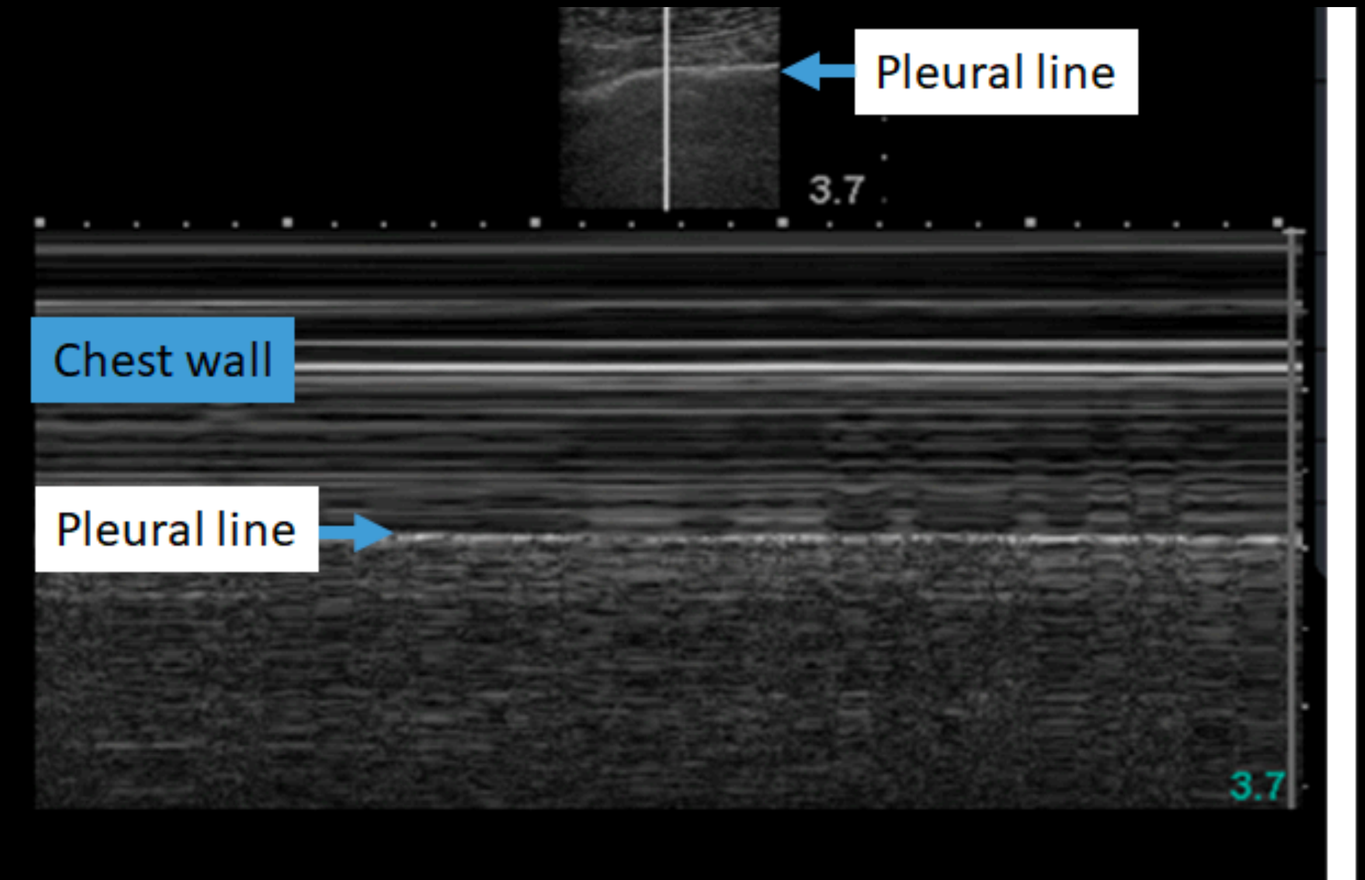


INDIRECT CONFIRMATION

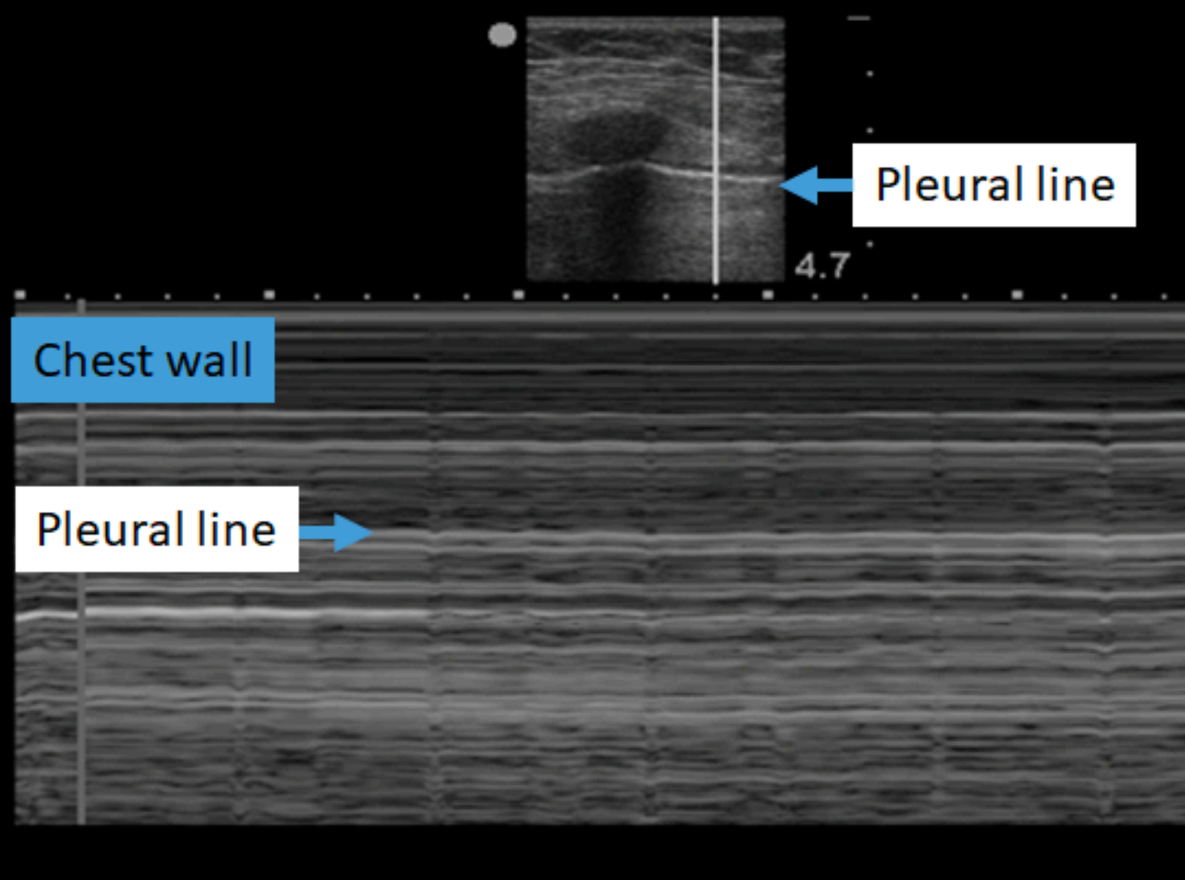
- Point your indicator towards the patient's head.
- Place your probe at the **mid-clavicular line at the 2nd intercostal space of the right (R1) and left (L1) lungs respectively**
- Anchor your probe in the space between two ribs.



Aerated lung= GOOD



Non-aerated lung= BAD

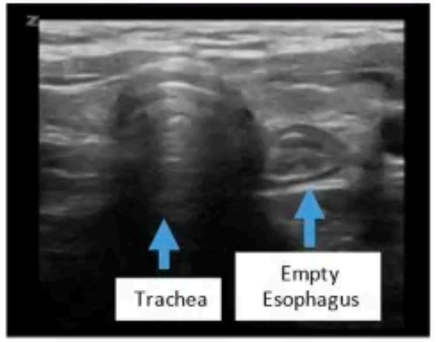


AIRWAY PLACEMENT ALGORITHM

Use a linear probe transversely oriented on anterior neck at the level of the trachea. Do you see a double trachea sign?

Yes

No



Reintubation

Evaluate for lung sliding bilaterally

Double trachea sign

Right

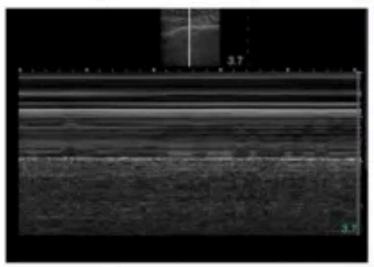
Left

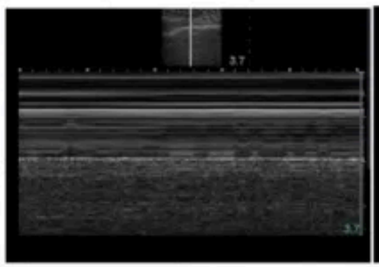
Right

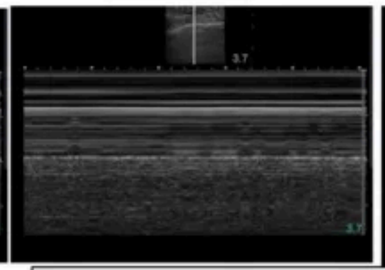
Left

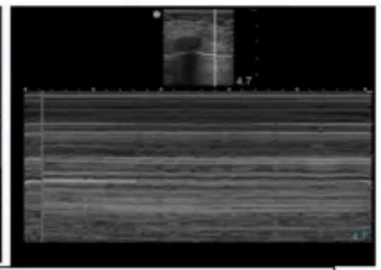
Right

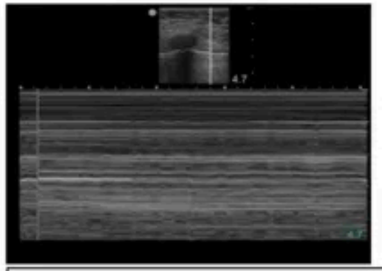
Left

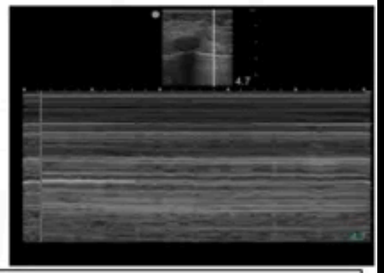












Bilateral lung sliding=correct ETT position

Lung sliding right hemithorax=query right mainstem, reposition ETT and reevaluation

No lung sliding bilaterally=query obstruction or esophageal intubation, reposition ETT and reevaluation