

Rapid Decision-Making in the ED: A Case-Based Approach to eFAST for Advanced Practice Nurses

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Conflict of Interest Statement

Nothing to disclose

Objectives

1. Demonstrate the Application of POCUS in Trauma Assessment
2. Differentiate Common POCUS Findings to Guide Clinical Decision-Making
3. Integrate POCUS into the ED Workflow to Enhance Patient Outcomes

Case Presentation

A 74-year-old patient with a history of hypertension, diabetes mellitus, and coronary artery disease was brought to the emergency department by his family after a fall at home. According to the family, pt tripped in the bathroom and fell, landing forcefully on the side of the bathtub. Chronic medications include aspirin, metformin and lisinopril. On arrival, the patient complains of right flank pain and difficulty taking deep breaths. Appears mildly distressed due to pain and exhibits shallow respirations. Initial vital signs are as follows:

- **Temperature:** 37.1°C
- **Heart Rate:** 112 beats per minute (tachycardic)
- **Blood Pressure:** 140/85 mmHg (normotensive)
- **Respiratory Rate:** 20 breaths per minute
- **Oxygen Saturation:** 93% on room air

Initial
Evaluation

Airway

Breathing

Circulation

Disability

Exposure

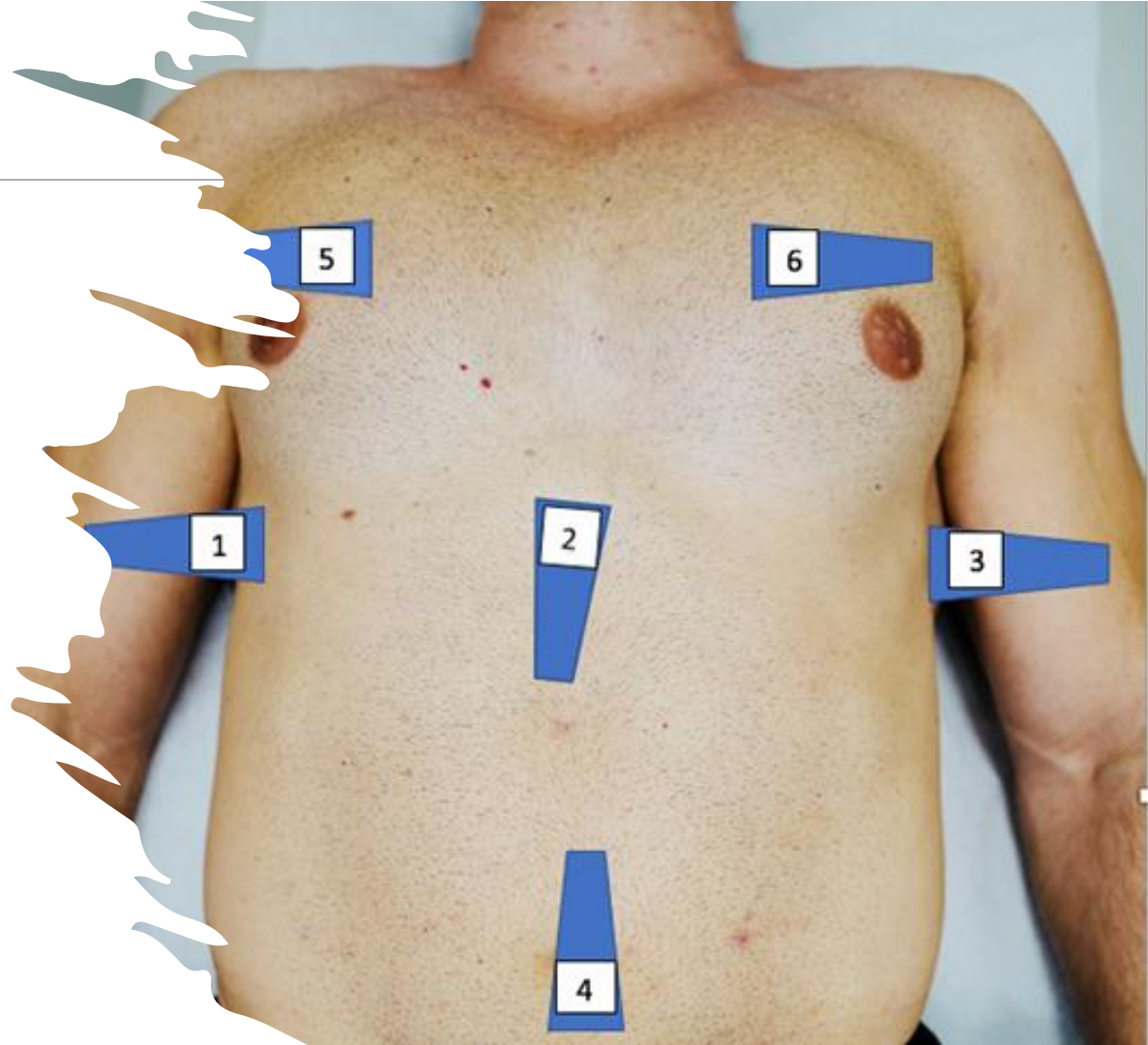


Anechoic Hypoechoic Isoechoic Hyperechoic

Then...Extended Focused Assessment with Sonography in Trauma (eFAST)

Scanning Areas

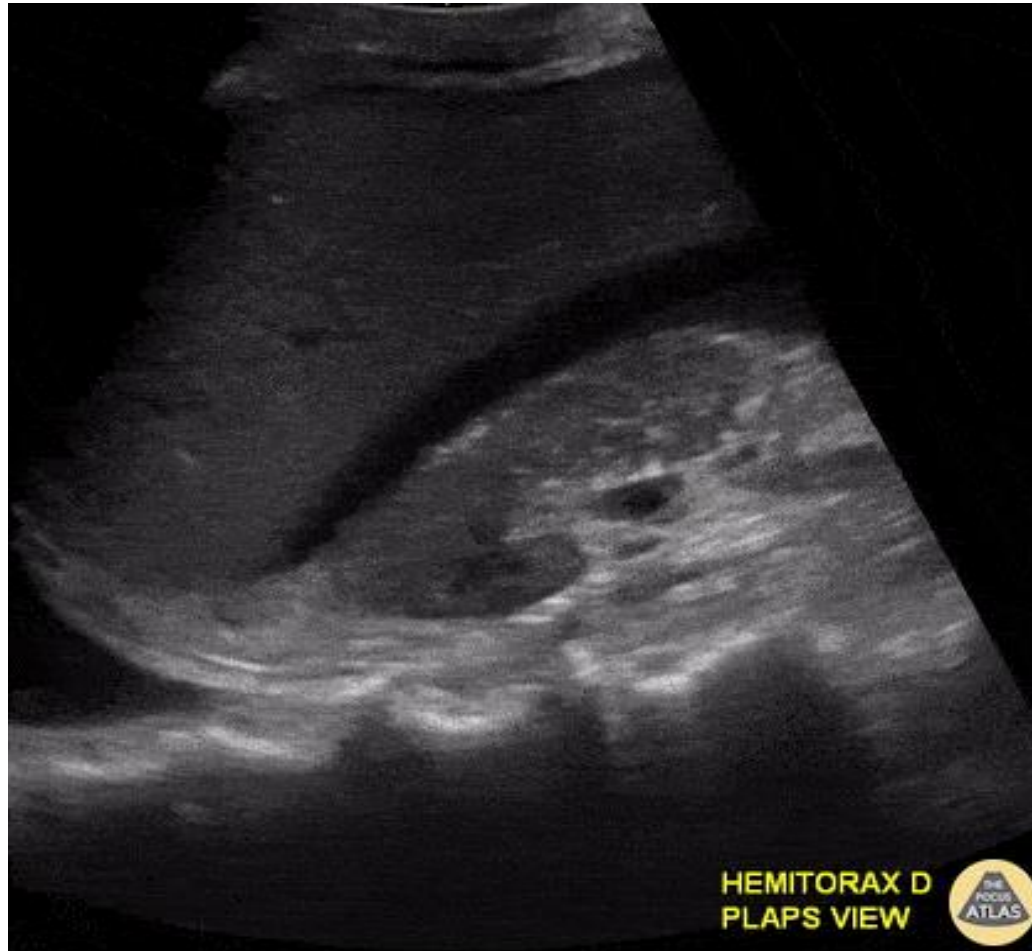
- 1) RUQ- Coronal Plane
- 2) subxiphoid/subcostal- cross sectional /flat
- 3) LUQ- coronal plane
- 4) Suprapubic – transverse and sagittal plane
- 5/6) Intercostal – sagittal longitudinal plane





Right Upper Quadrant View

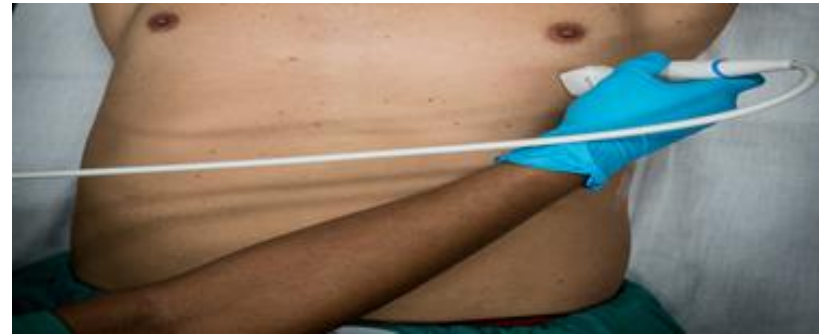
RUQ View Clip- Positive



Example of Negative RUQ



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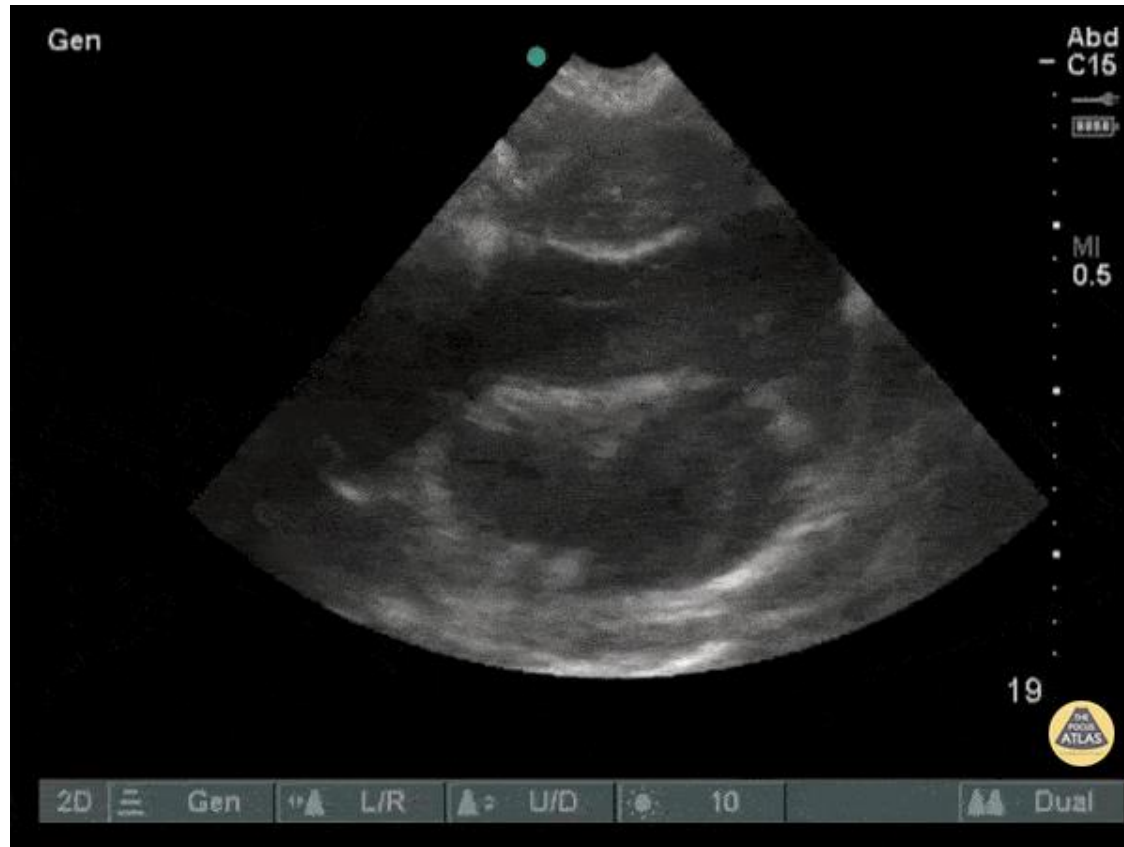


Subxiphoid and Apical Four Chamber View

Image Subxiphoid view- Negative



Example of Positive Subxiphoid View





Left Upper Quadrant View

Image Left Upper Quadrant View – Negative

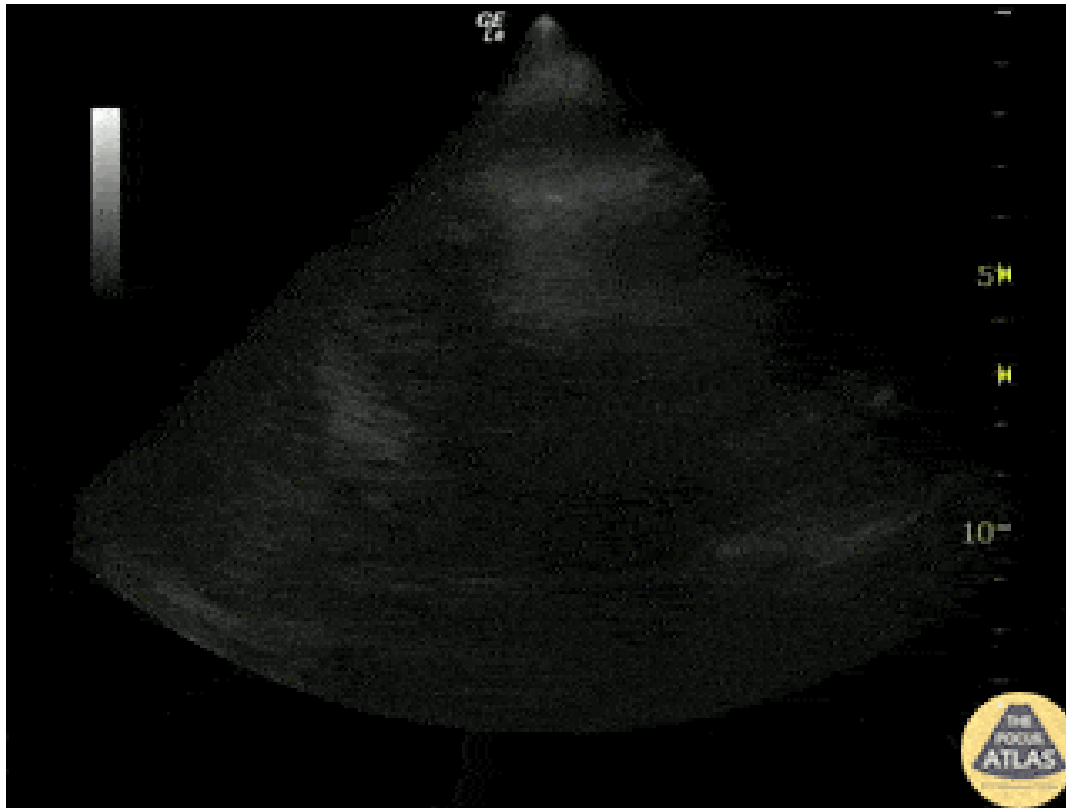


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Example of Positive LUQ View

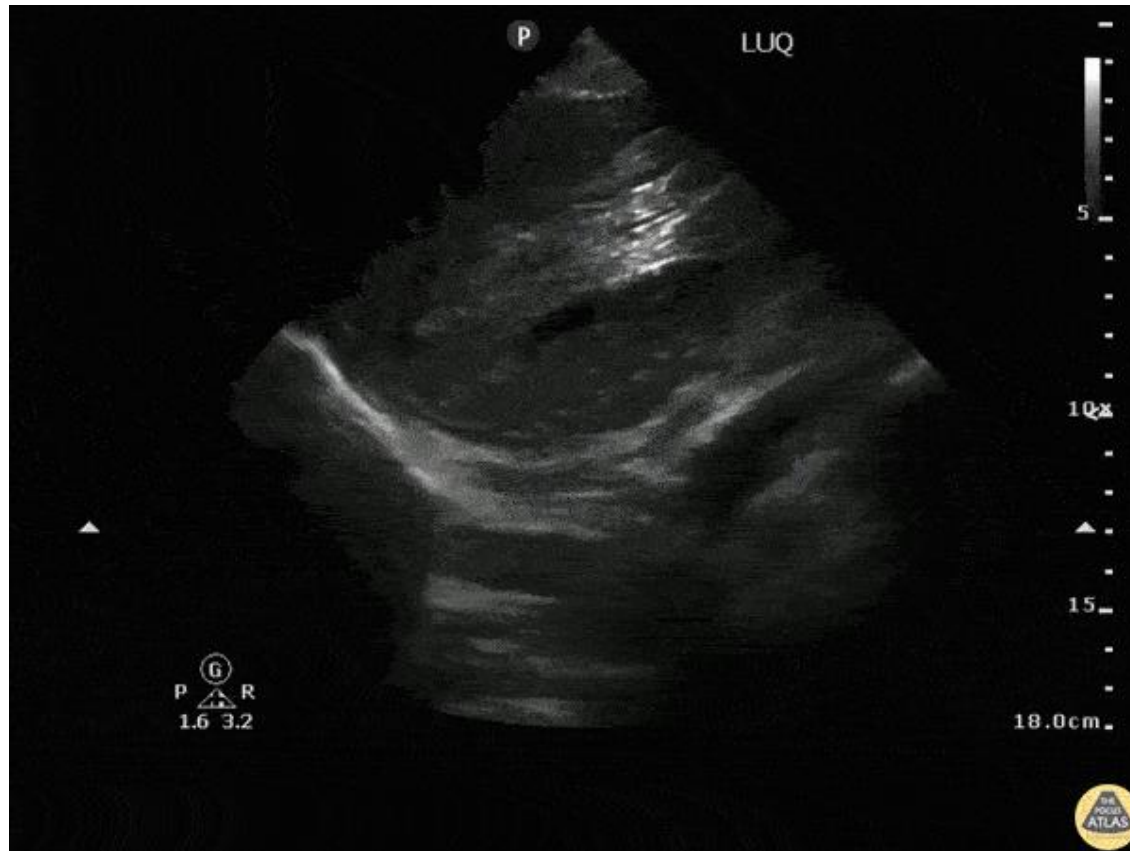


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Another LUQ Positive View



Image by Dr. Alec Gluckman <https://www.thepocusatlas.com/trauma-atlas>
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Image Suprapubic View Transverse – normal



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Image Suprapubic View Sagittal – normal

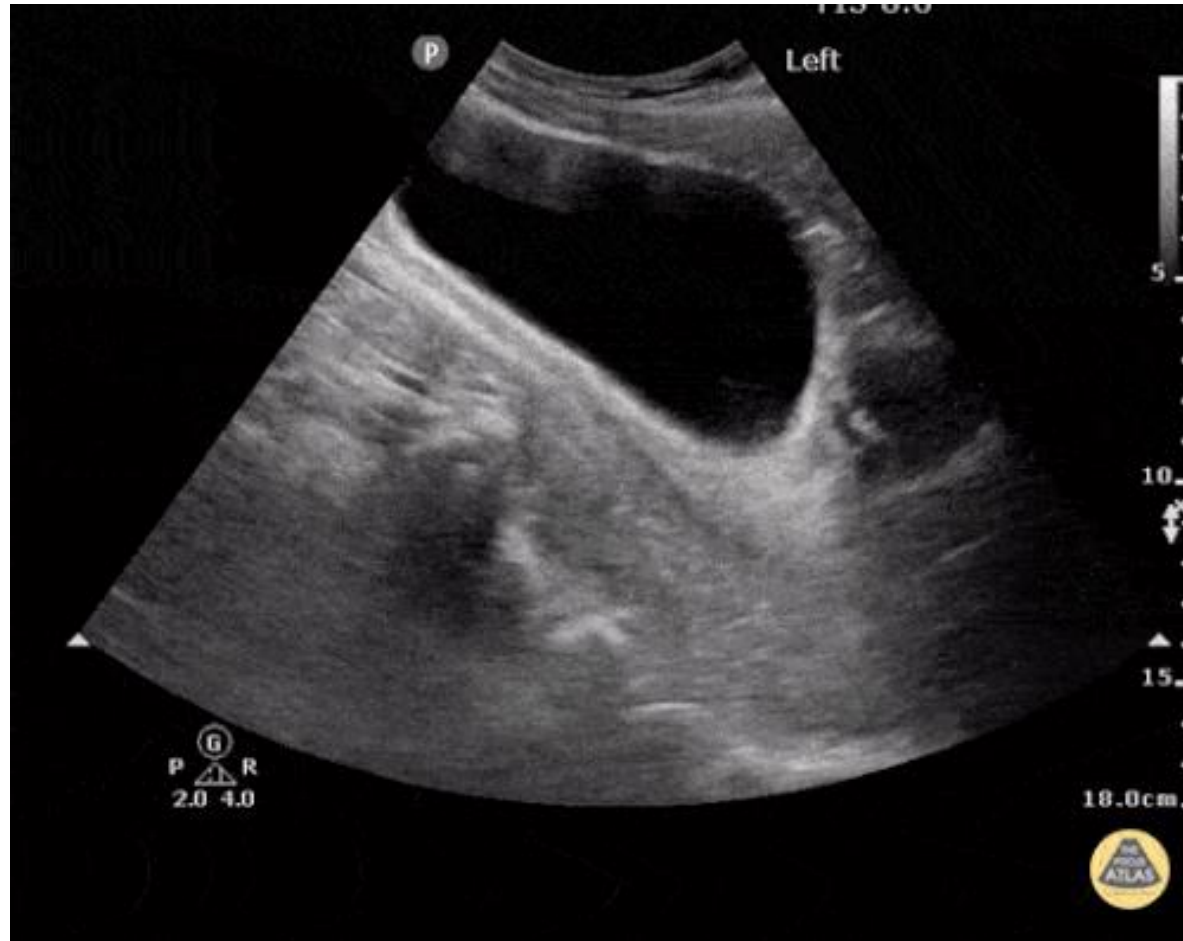


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Example of Positive Suprapubic View

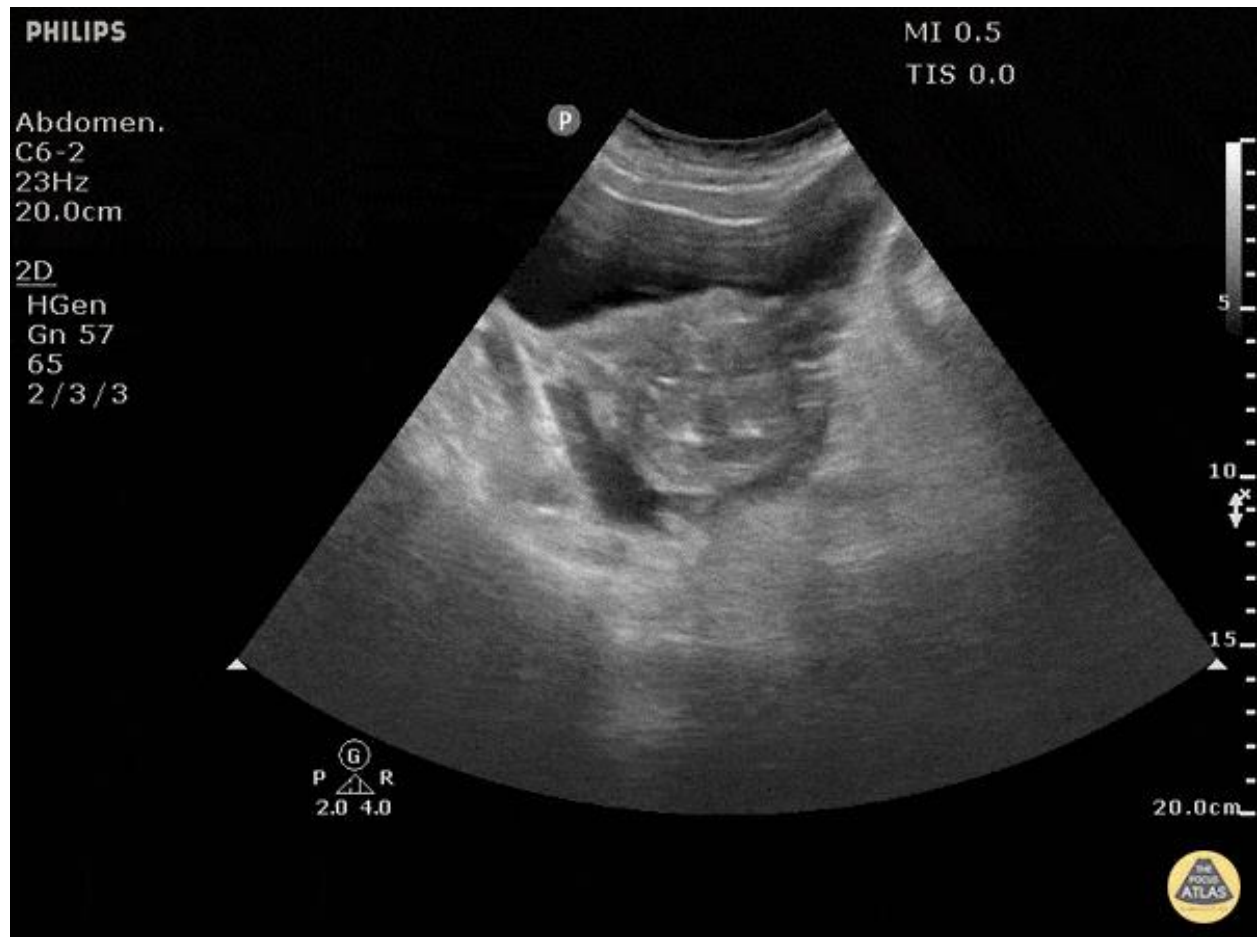


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Pleura Evaluation – Normal



Original Image by Gonzalez et al.

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Lack of Lung Sliding in a Pneumothorax

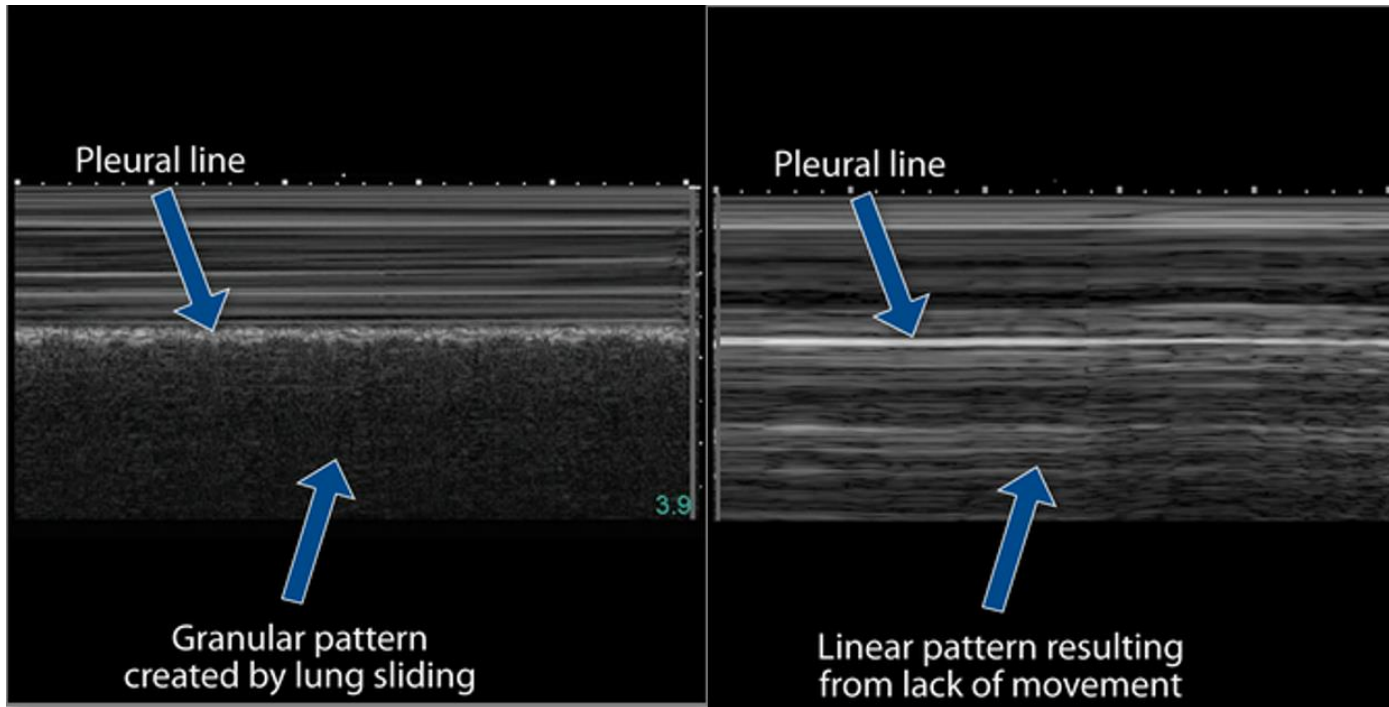


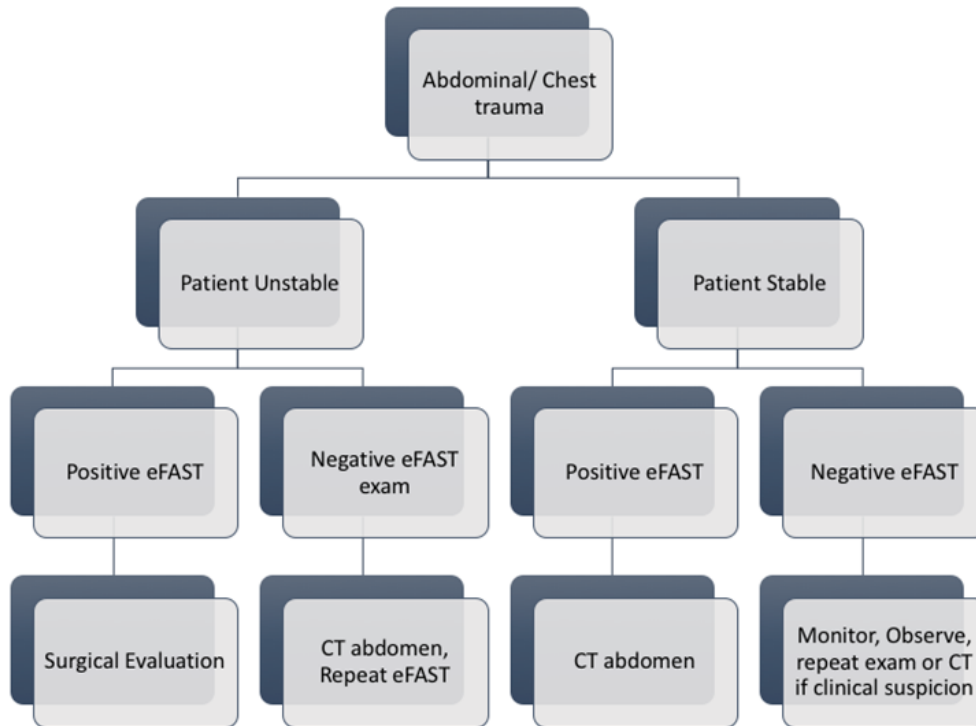
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Pleural Gliding M Mode

NORMAL -SEASHORE SIGN

ABNORMAL – BARCODE SIGN





How to Incorporate into Workflow

What is Next?



Is the patient still stable?



Vitals BP 90/60, HR 130 bpm, Sat 92% on O2



Call Trauma Surgery!

Want to Practice the Skill?





References

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