



2022 Hospital Medicine Update  
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# Bedside Ultrasound: Useful Techniques

Peter Bonadonna, EMT-P

# Disclosures

- I own a LLC that trains healthcare providers of all types in Point Of Care Ultrasound (POCUS)





Technique Is Extremely Valuable

# Prevent Transducer Damage



- Dropping
- Cable damage
- Transducer Stamping

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holder**

**Photo/movie to be added**

# Critical Techniques and methods

- Probe hold and manipulation



# Critical Techniques and methods



- Probe hold and manipulation
- Hand contact with patients skin is very important
- To know where you are and to manipulate the skin to aid scanning



# Critical Techniques and methods



- Probe hold and manipulation





# Critical Techniques and methods



- Bunch the skin in thin patients or use more gel to fill the gap

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holder**

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Use Presets When Available

- Almost all of the machines today have exam presets
- Will speed your exam after selection
- Will make the initial views more recognizable
- May reduce artifacts that may cause confusion
- They may aid in the identification of the exam post scan

# Examples of Presets



- ABD, Abdomen
- Cardiac, Echo
- Lung
- LE
- UE
- FAST, Trauma, ED
- Vascular
- Soft Tissue
- Small Parts

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**Photo/movie to be added**



# Choose The Right Transducer

# Transducer (Probe) Types



# Transducer



- Know the probe footprint and view



Sector



Linear array



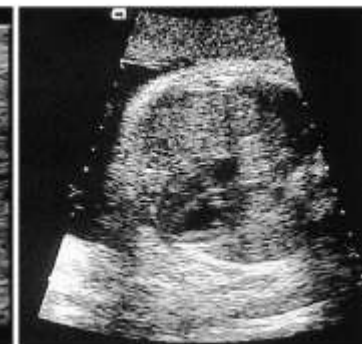
Curved array



Vector



Linear array



Curved array

B

# Transducer



- Butterfly iQ and iQ+
- Unique Technology







# Tips, Tricks and Hints

# Finding The Gallbladder



- After standard methods fail, try the FAST RUQ view
- Have the patient deeply inhale
- Rolling the patient left lateral often helps
- Have the patient direct the probe to the pain

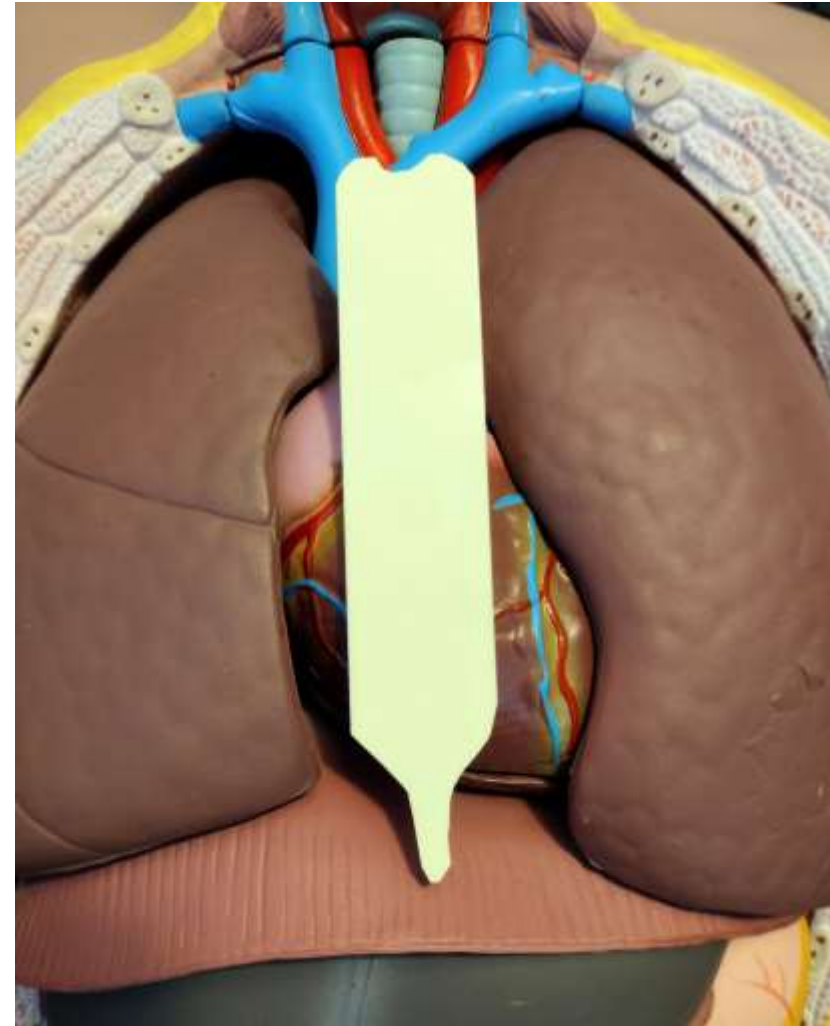


PSLA Difficulty Try This

# Parasternal Long Axis View



- Stay close to the edge of the sternum
- Have the patient exhale deeply
- Elevate the head of bed 10 degrees
- Roll leftward but not full left



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# Subcostal Cardiac Views



- Patient flat
- Have patients bend their knees up
- Choose adequate depth
- Hold the transducer on top
- The heart is in the anterior chest

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**Photo/movie to be added**



# Trouble Getting a Good Pleural Line

# Pleural Line View (For Lung Slide)



- Rock heel toe
- Fan side to side
- When the Pleural Line is closest to the top that is your best alignment





# Trouble Seeing Very Superficially

# Superficial Scanning



- There is a dead zone on most transducers
- Use refrigerated gel
- Use a commercial standoff
- Use a water bath
- Use a lateral water bath

# Superficial Scanning



# Superficial Scanning





Missing Your Doppler, Use POCUS

# Blood Pressure



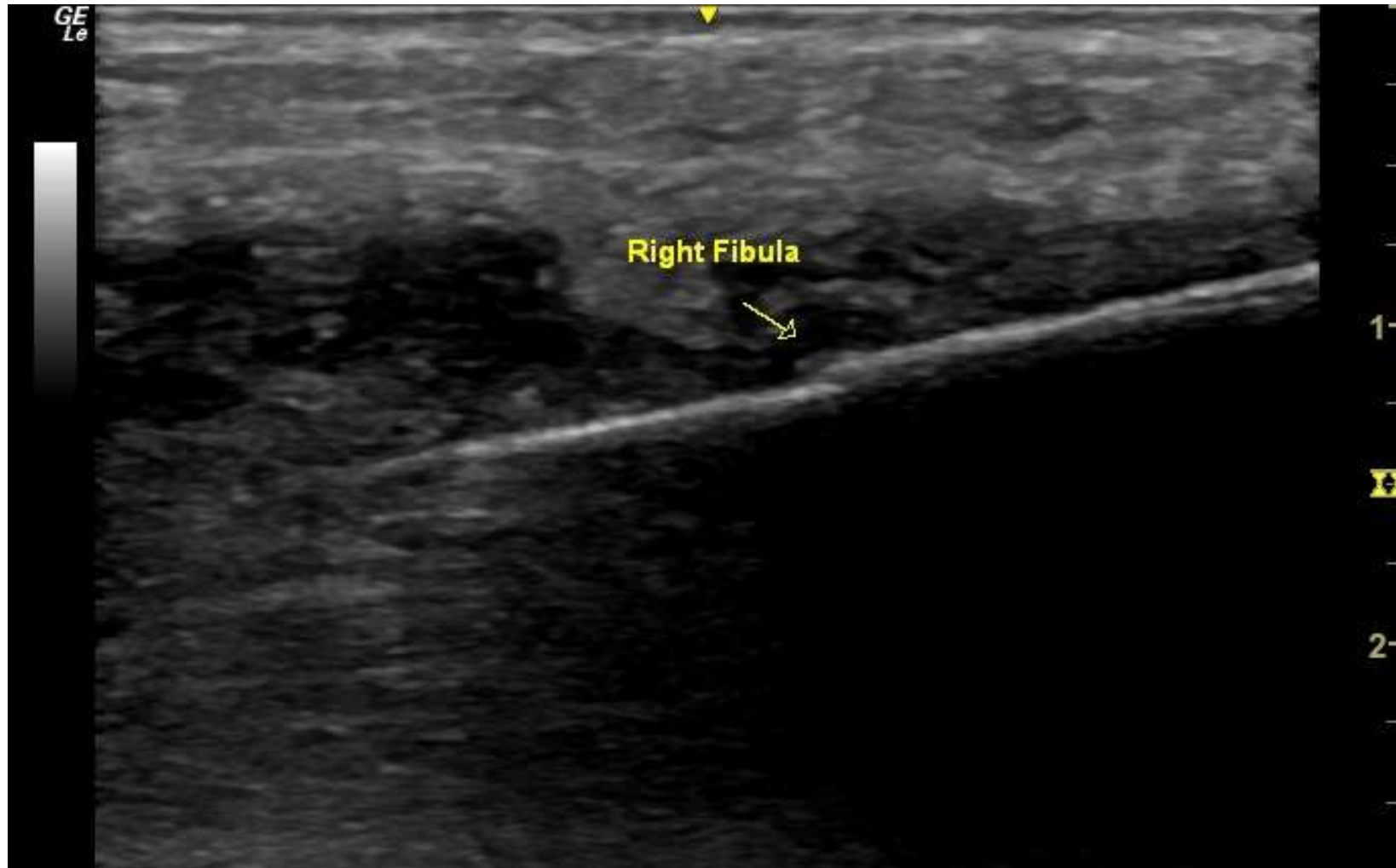
- Use color Doppler to identify brachial artery
- Pump up cuff pressure until flow terminates
- This point is the systolic BP



# Long Bone Fx

# Don't Trust Your X-Ray

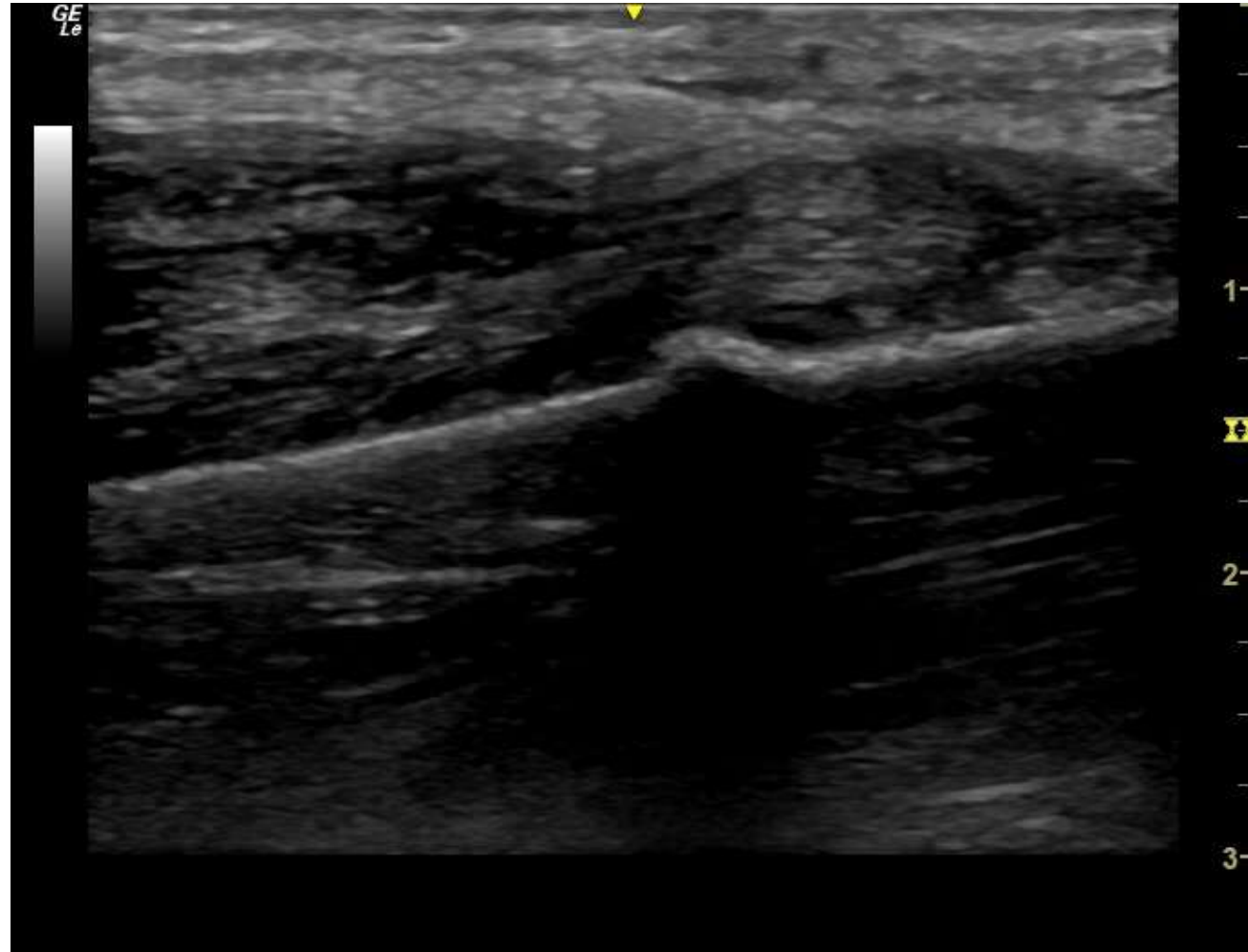
- POCUS has been found to be valuable in long bone fracture identification





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Questions?

Thank you for all that you do!

