Lung Ultrasound

ASSESSMENT OF OBSTETRIC PATIENTS FOR COVID-19 RELATED COMPLICATIONS

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Ultrasound has been used to aid in diagnosis of common chest pathologies due to its high sensitivity and specificity. Cost-effective, easy to use, safe and repeatable, the lungs can be rapidly assessed at the point-of-care. This makes ultrasound the ideal tool to use in obstetric patients with suspected COVID-19 infection to minimize interaction with other healthcare providers.

PERFORMING LUNG ULTRASOUND

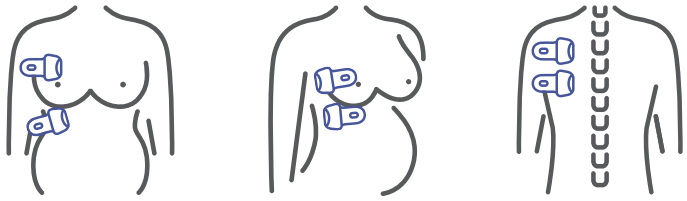
- Convex: Start in OB or Abdomen Preset
- Linear: Start in MSK or Small Parts Preset
- Phased: Start in Abdomen Preset

- Scan patient sitting, supine or lateral position

- Start at depth of 11-13 cm (average adult)
- Position focus at level of pleural line
- Low or no persistence to visualize the pleural sliding
- CrossXBeam™ CRI imaging off to evaluate B-lines

Visit **http://www.volusonclub.net/emea/latestnews?id=2693** for more information.

TRANSDUCER POSITIONS

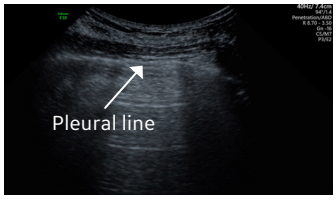


Anterior | Lateral/Axillary | Posterior

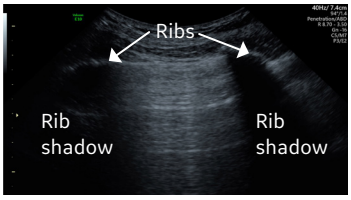
- Lungs should be examined bilaterally
- Each lung is divided into 6 segments
- Examine lungs in both axial and sagittal planes

NORMAL FINDINGS

PLEURAL LINE



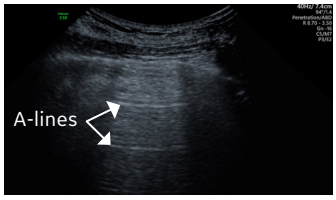
Axial



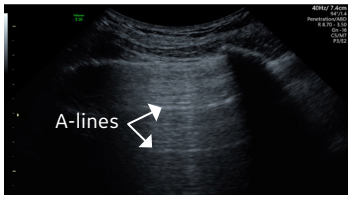
Sagittal

- Appears as a thin hyperechoic line
- Can be seen in normal lungs
- Demonstrates motion "sliding" on respiration

A-LINES



Axial

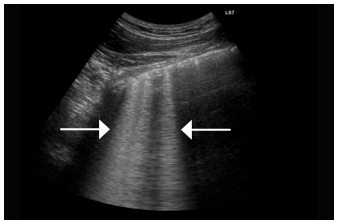


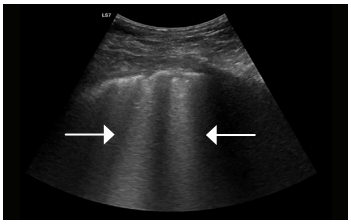
Sagittal

- Do not demonstrate motion
- Evenly spaced horizontal lines under the pleural line
- Correspond to normal reverberation artefact of the pleural line

FINDINGS IN COVID-19

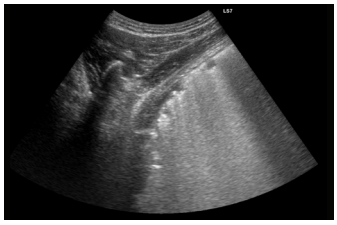
B-LINES





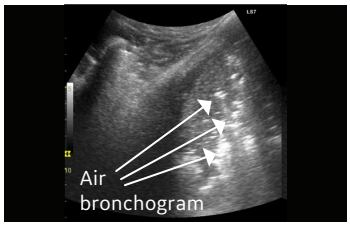
- Start at pleural line and radiate vertically through the image
- A-lines are no longer visualized
- Indicates moderate lung aeration loss resulting from interstitial syndrome

COALESCENT B-LINES



- Also called "white lung"
- B-lines that arise from pleura and radiate through image demonstrate coalescence

LUNG CONSOLIDATION



- Lungs acquire a (hypoechoic) tissue-like echotexture
- Caused by massive aeration loss