

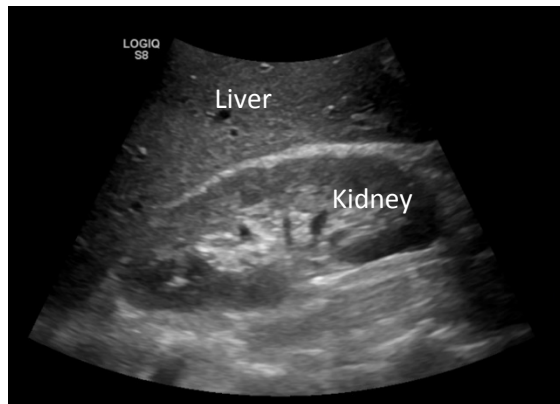
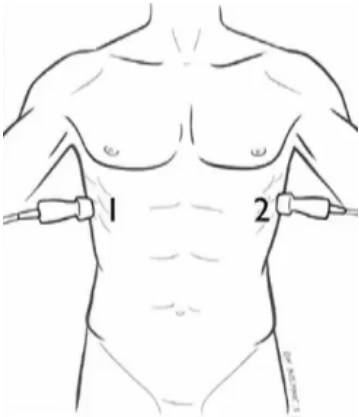
Ultrasound Assessment of Pleural Effusion

Setup

- 1) Transducer Selection - Curvilinear or Phased Array
- 2) Preset : Abdomen
- 3) Patient Positioning : Supine or Sitting

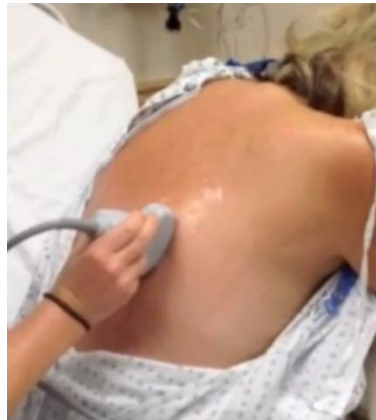
Scanning

- 1) Supine Patient
 - Place the probe at the posterior axillary line between the ribs in a longitudinal orientation (marker towards patient's head)
 - Identify the Liver (or spleen) and Kidney

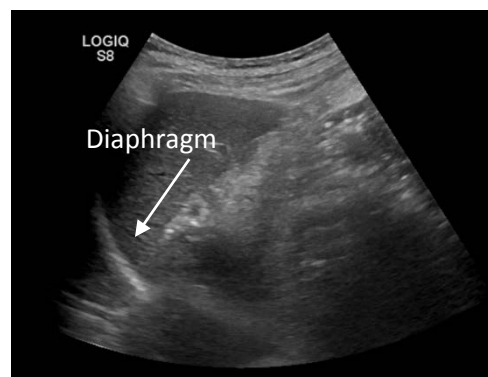
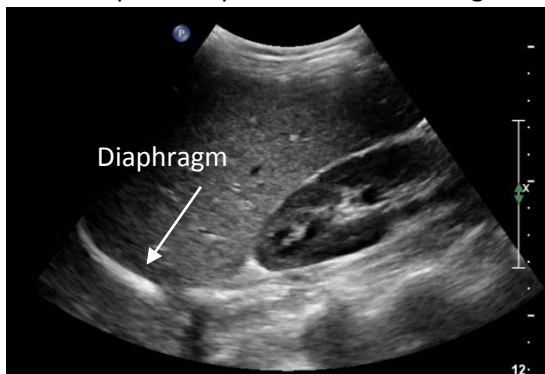


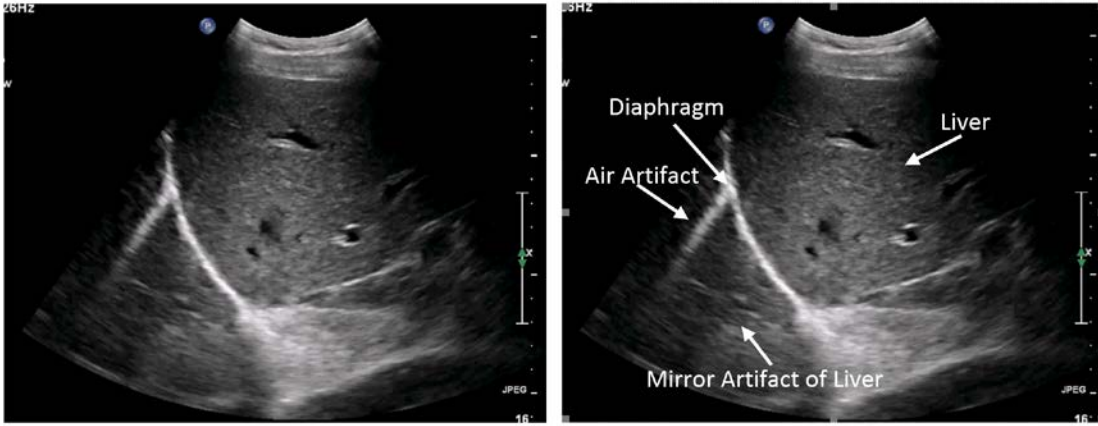
- 2) Sitting Patient

If sitting on the side of the bed, place the probe at the posterior inferior aspect of the lung-base

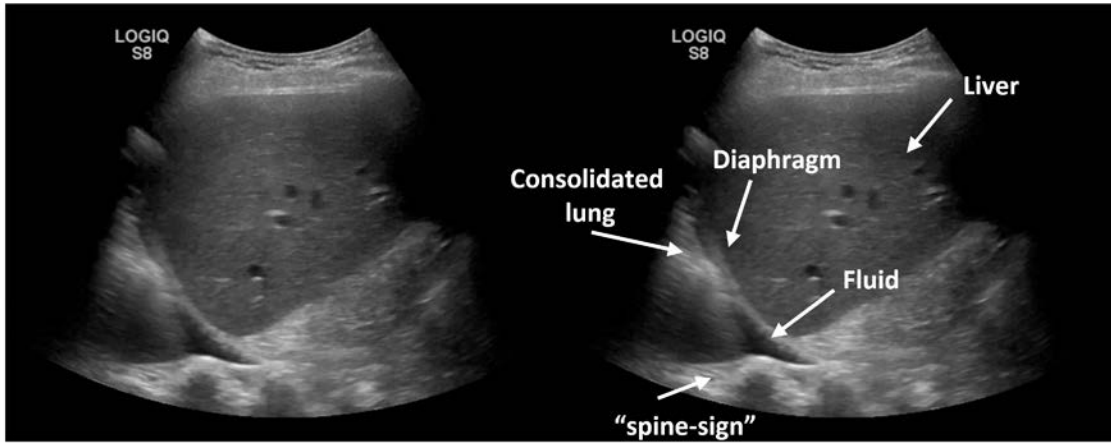


- 3) Slide the probe cephalad – note the bright echogenic diaphragm & Lung





Normal RUQ – fully aerated lung



RUQ – Hypoechoic fluid in pleural space. Presence of the 'spine-sign' is associated with a non-aerated lung. In this view, some consolidated lung is seen within the pleural space

If there is fluid, it will not only appear as black (due to the acoustic properties of fluid), but it will also allow you to see whatever is deep to it. In the case of a pleural effusion, you will now be able to see the spine run the length from the abdomen up into the thoracic cavity. If you can see the spine cephalad of the diaphragm, this is known as the 'spine-sign' and is conformation that there is no aerated lung present to interfere with the ultrasound beam.

