http://ccm.anest.ufl.edu/education/ultrasound

University of Florida Critical Care Medicine Ultrasound Curriculum

Self Learning Test - Pleural Effusion

Question	Your Answer	Correct Answer

1. In a supine patient, where is the most accurate location to evaluate for quantification of pleural fluid?

A. Posterior lung region
B. Lateral/Axillary lung region
C. Anterior lung region

Most fluid will accumulate here first. If fluid is seen in the lateral region the amount is usually larger than seen in posterior

2. When evaluating pleural effusions, what structure is most important to identify?

A. Heart
B. Pleural line
C. Lung line
D. Diaphragm

This is important to determine if the fluid is in the chest or abdomen and can have serious bad outcomes if not found prior to procedure

3. Which of the following is not a component of loculated pleural effusion?

A. Complex
B. Occupies non-dependent position
C. Simple
D. Does not shift with changes in position

Simple and complex is differentiated between separate fluid collections seen, echogenicity of the fluid, and whether material is visualized in the fluid

4. What is the sinusoid sign?

A. Interpleural respiratory variation on M-mode
B. Interpleural respiratory variation on B-mode
C. Interpleural respiratory variation on Doppler

Sinusoid sign means on M mode you see the lung moving up and down and will make a sine wave pattern. This indicates the effusion is not 'trapping' the lung and also is a good indicator of pleural fluid being present

5. What is the curtain sign?

A. Intermittent obstruction of window by inflating air containing lung
B. Thickening of line between liver and kidney
C. Effusion pattern that looks like a curtain
D. Shadow due to ribs with respiratory variation

Curtain sign refers to intermittent obstruction of the ultrasound window obtained by the lung and is important to estimate the maximum distance at inspiration so to not puncture the lung when performing thoracentesis