Lung Ultrasound in Cardiology

AIMS
- Differential diagnosis of dyspnea
- Diagnosis of pleural effusion
- Thoracentesis

METHODS-BLUE POINT
- Upper BLUE-point (UBP)
- Lower BLUE-point (LBP)
- Posterior axillary line point (PLAPS)

DEFINITIONS
1. Pleural sliding: sliding of visceral on parietal layer with respiration
2. A lines: repeating horizontal lines that are parallel and equidistant from the pleura, indicate dry interlobular septa
3. B lines: transient discrete laser-like vertical hyperechoic reverberation artifacts that arise from the pleural line (comet tails), extend to the bottom of the screen without fading, and move synchronously with lung sliding
4. Curtain sign: the appearance of an expanded and aerated lung at the costophrenic recess of the thorax
5. Pleural Effusion
6. Interstitial syndrome: 3 or more B lines in two symmetric spots

A.
- Dyspnea
  - B lines interstitial syndrome
    - Yes
    - Physical examination
      - Yes
      - Anamnesis
        - Heart failure
          - Yes
          - ARDS
        - No
        - Pneumothorax
      - No
      - Pleural sliding
        - Yes
        - Pulmonary embolism
          - Yes
          - Asthma
          - Others
        - No
      - Yes
  - Pleural effusion
    - Yes
    - Thoracentesis
      - Reduces rate of complications
        - Allows the identification of the best site
        - Can help assess the nature of the pleural effusion
        - Real-time monitoring of the needle
      - No
    - No pleural effusion

B.
- Pleural effusion
  - Curaint sign
    - Yes
    - Yes
    - Pleural effusion
  - No

C.

References