#### Ultrasound - Pleural Effusion Evaluation

#### **PURPOSE:**

To evaluate the chest cavity for the presence and characterization of pleural fluid.

#### SCOPE:

Applies to all ultrasound studies performed for the evaluation of pleural effusions in Imaging Services / Radiology

#### **INDICATIONS:**

- Signs, symptoms, or other imaging studies suggestive of pleural effusion
- Conditions associated with pleural effusion
- Follow up known pleural effusion

#### **CONTRAINDICATIONS:**

No absolute contraindications

### **EQUIPMENT:**

Linear or curved array transducers with a frequency range of 5-9 MHz that maximizes image resolution in the near field-of-view. Sector array transducers may be required for obtaining an adequate intercostal acoustic window. A low-frequency curvilinear probe may be required for appropriate penetration and resolution depending on patient's body habitus.

#### **PATIENT PREPARATION:**

None

# **EXAMINATION:**

#### **GENERAL GUIDELINES:**

A complete examination includes evaluation of the pleural cavity for free or loculated fluid.

#### **EXAM INITIATION:**

- Introduce yourself to the patient
- Verify patient identity using patient name and DOB
- Explain test
- Obtain patient history including symptoms. Enter and store data page.
- Place patient in sitting or lateral decubitus positioning.

## **TECHNICAL CONSIDERATIONS:**

- Review any prior imaging, making note of associated abnormalities requiring evaluation.
- Preferable position is sitting upright, especially for a planned thoracentesis. Otherwise, lateral decubitus positing may be attempted with the patient turned away from the side under evaluation (left lateral decubitus for right-sided chest imaging). Document patient positioning on images.
- Document the extent and location of any fluid identified

US Pleural 1
Effusion

# UT Southwestern Department of Radiology

#### **DOCUMENTATION:**

- Longitudinal images:
  - o Representative images through multiple adjacent intercostal spaces
- Transverse images:
  - o Representative images
- Cine images to document mobile debris, atelectatic lung, or other mobile structures

2

• Data page(s)

#### PROCESSING:

- Review examination images and data
- Export all images to PACS
- Document relevant history and any study limitations

## **REFERENCES:**

ACR-SPR-SRU Practice Guideline (Revised 2011)

US Pleural Effusion

# UT Southwestern Department of Radiology

# **REVISION HISTORY:**

SUBMITTED BY:	David T. Fetzer, MD	Title	Medical Director
APPROVED BY:	David T. Fetzer, MD	Title	Medical Director
APPROVAL DATE:	11-09-2015		
REVIEW DATE(S):	09-24-2018		Jeffrey Pruitt, MD
REVISION DATE(S):	11-14-2015	Brief Summary	
REVISION DATE(S):	09-24-2018; Pruitt	<b>Brief Summary</b>	No changes

US Pleural Effusion