
Procedure Name: **Elbow (Joint Effusion)**

Updated: 11/28/07

Indications:

May include but not limited to arm pain of questionable etiology, tightness, tenderness, swelling, or any other valid medical reason/indicators determined by referring physician.

General Description:

This is a limited survey to localize and characterize joint effusion of the upper extremities unilateral or bilateral. Upon completion of exam show study to radiologist before patient is allow to exit room.

Patient Preparation:

There is no preparation for this exam.

Imaging Sequence:

ANTERIOR ELBOW

- **Sagittal and transverse views (include color Doppler)**
 1. Patient is placed in a supine position
 2. Arm is extended with hand supinated
 3. Show coronoid fossa with anterior hyperechoic fat pad
 4. Fluid collection may display fat pad

POSTERIOR ELBOW

- **Sagittal and transverse views (include color Doppler)**
 1. Patient is placed in a supine position
 2. Arm is flexed with hand placed on patients abdomen
 3. Show olecranon fossa with anterior hyperechoic fat pad
 4. Fluid collection may display fat pad

IMAGING INFORMATION

- On both anterior and posterior imaging key landmarks include the related fossa and hyperechoic fat pad
- Fluid collections can be anechoic (simple fluid) to complex fluid varying from hypoechoic to hyperechoic. Heterogeneous joint fluid may be due to hemorrhage or infection.
- If fluid collections are present, obtain images to show the scope of the fluid collection and if the interface between the fluid and surrounding soft tissues are irregular image this as well.
- Findings of joint recess compressibility, motion of contents (within joint recess) with transducer pressure, and lack of increased blood flow with color/power Doppler suggest complex fluid as opposed to synovitis.
- The most sensitive location for identification of joint fluid is the posterior olecranon fossa in elbow flexion

