

## **PELVIC FERTILITY ULTRASOUND**

### Patient Prep (recommended):

1. Patient is to start drinking 32 ounces of water 2 hours prior to exam time, finishing the water 1 hour prior to exam time. The patient should have a full bladder for the exam.
2. If patient is unable to fill bladder please note this exception.

### Survey:

Perform a real-time survey of the pelvis with attention to Uterus, Ovaries, Follicles, Bilateral Adnexa and Cul-de-sac.

### Image Documentation:

Each image must be labeled with patient identification, facility identification, examination date, medical record number, accession number, initials of the imaging technologist, organ/area identification, transducer orientation, and patient orientation if different from supine.

If an image of a structure is not well seen or not identified at all, take an image of the area of the structure and annotate the purpose of the image (i.e. ovary not seen).

### General Procedure Description:

1. The uterus, ovaries and endometrium should be examined trans-abdominally first (unless ordering physician states only wants a transvaginal exam). The uterus, ovaries, endometrium and any abnormalities should be recorded. Measurements in two dimensions should be made in one transverse axis and two in longitudinal axis. Measure each and every follicle in the ovaries that measures 2 mm or greater in two perpendicular planes. The longest diameter (in any plane) needs to be one of the two measurements.
2. Volumes of the uterus and ovaries should be calculated and recorded.
3. Measurement of endometrium.
4. Transvaginal exam should be utilized to obtain optimal imaging of the uterus, ovaries, follicles in ovaries, bilateral adnexa, cul-de-sac and any focal abnormalities. The transvaginal exam needs to be explained to the patient and the patient needs to give verbal consent for the exam. The transvaginal exam is immediately terminated if the patient complains of pain or severe discomfort. Termination of the exam needs to be documented in a note in EPIC.
5. Pathology should be imaged and measured. Provide color Doppler images of all pathology. All images should have the correct annotation recorded.
6. Color-flow images of each ovary should be documented.
7. Color-flow images of important vascularity should be documented as needed.
8. Doppler waveforms should be recorded to document relevant venous and arterial blood supply as the guidelines below state. \*

## Guidelines for pelvic ultrasound:

### UTERUS

1. Six longitudinal axis images of the uterus. Measurements of the length and depth on the midline scan are to be documented.
2. One midline image of the cervix.
3. Six transverse images of the uterus. Measurement of the width of the uterus is to be documented.
4. Transverse image of the cervix.
5. A volume measurement of the uterus is to be documented.
6. The uterus size, shape and orientation to be documented.
7. Document any pathology in the uterus. Take longitudinal and transverse measurements as necessary and document color flow. It needs to be clear where the pathology is located in the uterus.

### ENDOMETRIUM

1. Accurate images of the endometrium documented in long and transverse axis. In the long axis, a measurement of the endometrium needs to be documented. If fluid is noted within the endometrium, measure the two separate layers of the endometrium excluding the fluid. These two measurements will be added together for the endometrium thickness.
2. Color flow image of the endometrium.
3. If pathology is noted in the endometrium and the ultrasound equipment has the capability to perform 3D imaging, provide 3D coronal views of the endometrium. If unable to perform 3D imaging, provide Cine loop (clip store) of the endometrium.

### OVARIES:

1. Two longitudinal axis images of each ovary. Measurements of the length and depth are to be documented.
2. Two transverse axis images of each ovary. Measurement of the width to be documented.
3. A volume measurement of each ovary documented.
4. Color flow image of each ovary documented.
5. Doppler waveforms of each ovary should be recorded to document relevant venous and arterial blood supply as needed. \*See Below
6. If an ovary can not be located, take an image of that area of the structure and annotate the purpose of the image (i.e. ovary not seen).
7. Document and measure each and every follicle in the ovaries that measures 2 mm or greater in two perpendicular planes. The longest diameter (in any plane) should be one of the two measurements.

### ADNEXA:

1. One longitudinal axis image of each adnexa to be documented.
2. One transverse image of each adnexa to be documented.
3. If pathology is noted, assess the relationship to the ovaries and uterus.

CUL-DE-SAC:

1. One long axis image of the cul-de-sac.
2. One transverse image of the cul-de-sac.

**Guidelines for Doppler waveforms of the ovaries\***

1. Venous and arterial Doppler waveforms should be obtained if there is a concern for torsion.
2. Venous and arterial Doppler waveforms should be obtained if an abnormality is seen greater than 4 cm.
3. Venous and arterial Doppler waveforms should be obtained if the patient is having unilateral moderate to severe adnexa pain.

All color Doppler images should be with and without color.

All measurement images should be with and without measurement.

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