Ultrasound – Limited Pelvis Evaluation

PURPOSE:
A targeted evaluation of any part of the uterus (myometrium and endometrium), adnexa (ovaries and fallopian tubes), and/or cul-de-sac in non-pregnant women, following up a previous imaging finding.

SCOPE:
Applies to all ultrasound pelvis studies performed in Imaging Services / Radiology

ORDERABLE:
- EPIC Order: US Pelvis

CHARGEABLES:
- US Pelvis Transabdominal Only Limited (CPT 76857)
- US Pelvis Transvaginal Only (CPT 76830)

INDICATIONS:
- Complete pelvis US performed within last 12 months
    - If a complete pelvic US has NOT been performed within the last year then a complete pelvic US should be performed. See "US Pelvis Transabdominal & Transvaginal" protocol
- Localization of an intrauterine device (IUD)
- Abnormal pelvic findings on previous ultrasound imaging study

CONTRAINDICATIONS:
- No absolute contraindications
- **Transvaginal approach should not be performed on a minor without verbal consent from a parent/legal guardian, on a patient who is virginal, and/or has refused the exam.**

EQUIPMENT:
- Curvilinear transducer with a frequency of 1-9 MHz or greater that allows for appropriate penetration and resolution depending on patient's body habitus for transabdominal approach.
- Endovaginal transducer with frequency of 5 MHz or greater. Probe cover.

PATIENT PREPARATION:
- For transvaginal approach:
    - Obtain verbal consent from patient or, if a minor, from parent/guardian
    - Obtain chaperone (requirement for all male sonographers)
    - The bladder should be empty

EXAMINATION:

GENERAL GUIDELINES:

A chaperone is required for male sonographers. Chaperone's name should be documented in Tech Notes and Electronic Health Record.

A targeted examination of the region requiring follow up, including any portion of the uterus (myometrium and endometrium), adnexa (ovaries and fallopian tubes), or cul-de-sac. Review prior imaging to confirm that a complete pelvis US has been performed within last 12 months.

Review the abnormality requiring follow up. Limit the exam to area of concern unless new abnormality is incidentally seen. **Should not be performed for Emergency Department patients.**

EXAM INITIATION:

- Introduce yourself to the patient. Explain test.
- Verify patient identity using patient name and DOB.
- **Obtain patient history including symptoms and last menstrual period (LMP).** Record urine pregnancy test (UPT) or bHCG results, if applicable and available. For these exams, UPT should be negative / bHCG should be 0.0. Otherwise, sonographer should follow "US OB First Trimester" protocol.
- Enter and store data page.
- Place patient in supine and/or lithotomy position.
- For transvaginal exam, apply endovaginal probe cover. For immediately post-partum patients, consider a sterile probe cover.

TECHNICAL CONSIDERATIONS:

- Always review any prior imaging, making note of abnormalities requiring further evaluation.
- Transvaginal approach may be performed in the post-partum period, at the discretion of the ordering clinician. A sterile probe cover should be applied for immediate post-partum exam.
- Endovaginal transducer may be introduced by the patient, sonographer, or physician.
- Uterine length is measured on the long axis image from fundus to cervix (external os). In a flexed uterus, segmental measurements may be needed. AP dimension or depth of the uterus is measured on the same long axis view perpendicular to the length from anterior to posterior wall. Maximum width is measured on the transverse view.
- Evaluate myometrium and cervix for contour change, echogenicity, masses, and cysts
- Measure largest fibroid(s) with particular attention to fibroids that contact endometrium.
- Endometrial thickness measured on midline long image including anterior and posterior basal endometrium, excluding adjacent hypoechoic myometrium and endometrial fluid.
- Evaluate the endometrium for uniformity, focal abnormality, fluid/masses in the endometrial cavity, and presence/location of IUD.
- Measure the ovaries in 3 dimensions on views obtained in 2 orthogonal planes. Ovaries may not be identifiable, usually prior to puberty, after menopause, or in the setting of large fibroids. Survey the adnexal region, cul-de-sac, and around the uterine fundus.
- Survey the adnexal region for masses and dilated tubular structures. Normal fallopian tubes are not commonly identified.
- Evaluate cul-de-sac for presence of free fluid or mass. Differentiate mass from bowel loops.
- Focal abnormalities should be documented with size measurements in 3 dimensions, color Doppler, and its relationship to adjacent structures.
- 3D acquisitions must be acquired with coronal reconstructions for patients presenting for evaluation of an IUD.
- Addition of reconstructed coronal view of the uterus from 3D acquisition may also be useful for evaluation of congenital uterine anomalies.
- Note and report any tenderness during the exam.

DOCUMENTATION:
This targeted examination only requires imaging of the structure or region of interest for purposes of follow up. Exam may include any of the following:

- **Transabdominal and/or Transvaginal approach to answer clinical question:**
  - Uterus
    - Grayscale images
      - Longitudinal
        - Right lateral, midline, left of midline
        - Midline without and with length and AP measurement
        - Midline with endometrial thickness measurement and color Doppler (annotate LMP if not stored on data page)
        - Cervix and cul-de-sac
      - Transverse
        - Cervix and cul-de-sac
        - Lower uterine segment
        - Mid body with transverse measurement
        - Fundus
    - Color Doppler
      - Longitudinal of endometrium
      - Any focal myometrial abnormalities
    - Cine sweep, transverse (superior to inferior) and longitudinal through uterus
    - For IUD evaluation, 3D images through the endometrial cavity should be obtained with coronal reformatted images submitted to PACS (on 3D capable ultrasound devices only).
  - Ovaries, Right and/or Left
    - Longitudinal and transverse images through each ovary
    - Representative images without / with measurements in 3 orthogonal planes
    - Image without and with color Doppler
      - Arterial and venous spectral Doppler waveforms of ovary/ovaries required if patient presents with pain or if torsion is suspected.
    - Cine sweep, transverse (superior to inferior) and longitudinal (medial to lateral) through ovary/ovaries.
      - or adnexa(s) if ovary/ovaries not visualized
- Data page(s)

PROCESSING:
- Review examination images and data
- Export all images to PACS
- Confirm data in Imorgon (where applicable)
- Document relevant history and any study limitations.

REFERENCES:
ACR-ACOG-AIUM-SRU Practice Guideline (Revised 2009)

REVISION HISTORY:

RE-SUBMITTED BY:	Monica Morgan, RDMS, RVT	**Title**	Ultrasound Technical Supervisor
APPROVED BY:	David T. Fetzer, MD	**Title**	Medical Director
APPROVAL DATE:	06/01/2020		
REVISION DATE(S):	07-21-2022	**Brief Summary**	Added clarification that adnexa cines should be obtained in area of concern if ovaries not visualized; added emphasis that this limited protocol should not be used for patients in the ED