

ULTRASOUND LECTURE SERIES

Sonography of the Normal Female Pelvis

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Objectives

Following the presentation:

1. One will be able to recognize the architecture of normal female pelvic structures using transabdominal, transvaginal and color Doppler sonography.
2. One will become familiar with the normal pelvic findings including the cyclic changes of the uterus and ovaries in order to differentiate these from true abnormalities.
3. One will become more aware of newer sonographic techniques as well as other radiologic modalities which may play a role in pelvic evaluation.

Topics

1. Normal appearance of the nonpregnant internal genitalia
 - Cervix
 - Uterus
 - Ovary
 - Fallopian tubes
 - Cul-de-sac
 - Pelvis
 - Vessels of the pelvis
2. Sonographic appearance of the female pelvis with respect to the menstrual cycle
 - Ovaries/follicles
 - Corpus luteum cysts
 - Endometrial thickness
3. Other techniques for imaging the female pelvis
 - Saline/sonohysterography
 - Contrast agents
4. Other imaging modalities (brief)
 - Computed tomography and magnetic resonance imaging

Review Questions

1. Limitations of transabdominal sonography as opposed to transvaginal sonography include all of the following *except*:
 - A. Attenuation of sound from the body wall.
 - B. Need for lower-frequency transducers.
 - C. A global view of the pelvis is provided.
 - D. A distended urinary bladder is needed to provide a scanning window.
2. A standard pelvic ultrasound exam may be composed of:
 - A. Transabdominal sonography.
 - B. Transvaginal sonography.
 - C. Color Doppler sonography.
 - D. All of the above.
3. The measurement of the endometrium:
 - A. Should include a single-layer thickness.
 - B. Should not exceed 14-16 mm in the menstruating age group.
 - C. Commonly measures greater than 8 mm in the postmenopausal age group.
 - A. A and B are correct.
4. A postovulatory corpus luteum may have the following characteristics:
 - A. Peripheral color Doppler signal.
 - B. Thin wall.
 - C. Large cystic component.
 - D. Central echogenic component.
 - E. A and D are correct.
5. Indications for saline/sonohysterography include:
 - A. Suspected uterine synechiae.
 - B. Abnormal vaginal bleeding.
 - C. Inadequate visualization of the endometrium.
 - D. All of the above.