

Clinical Guideline

Clinical guideline of Abdominal Ultrasound and Transvaginal Ultrasound

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I. Indications

- A. Fetal Ultrasound or Ectopic Pregnancy evaluation
 - 1. Early first trimester (before day 42, HCG <6000)
- B. Postmenopausal uterine bleeding
- C. Pelvic mass
- D. Dysmenorrhea
- E. Infertility evaluation

II. Technique

- A. Uterus
 - 1. Check cervix with the probe pulled slightly back
 - 2. Measure Uterine Size in sagittal and coronal views
 - 3. Identify posterior masses and cul-de-sac fluid
- B. Ovaries
 - 1. Ovaries are adjacent to the femoral vessels
 - 2. Identify free fluid near adnexa
 - 3. Completely scan ovaries in two planes
 - 4. Normal ovarian volume: 6-14 cubic cm
- C. Endometrium
 - 1. Follicular Phase: Endometrium begins to thicken
 - 2. Ovulation: Triple line seen
 - 3. Secretory phase: Endometrium echogenic and 8-12 mm
 - 4. Postmenopausal: Thickness <6-8 mm

III. Efficacy

- A. Postmenopausal Bleeding: Endometrial stripe evaluation

1. Endometrial Stripe >5 mm considered abnormal
 - a. Consider Endometrial Biopsy
2. Scandinavian Study (n=1168 all with uterine bleeding)
 - a. 114 women with Endometrial Cancer by biopsy
 - b. No cancer cases in endometrial thickness <4mm
 - c. Reference
 - i. *Karlsson (1995) Am J Obstet Gynecol 172:1488-94*
3. Japanese study (n=150, 47 with uterine bleeding)
 - a. Six patients had Endometrial Cancer
 - b. Three cancer patients had 2-4 cm thick endometrium
 - c. Reference
 - i. *Tsuda (1995) Am J Obstet Gynecol 172:1494-5*