

ULTRASOUND PROTOCOLS



Reviewed 10/30/20

OB 1st Trimester

Indication	Confirm the presence of pregnancy, ectopic pregnancy, vaginal bleeding, gestational age evaluation, suspected multiple gestations, mass, additional indications using ICD guidelines
Prep	Transabdominal: Full Bladder. Have patient drink 32 oz water, finishing 60 minutes before scan time. Patient is supine Transvaginal: Empty Bladder. Patient in lithotomy position
Procedure	<p>FIRST TRIMESTER TRANSABDOMINAL OBSTETRICAL EXAM:</p> <ol style="list-style-type: none">1. Obtain complete patient history, including last menstrual period, current and past symptoms, recent laboratory and other test results, and relevant risk factors. Enter patient data into real-time scanner2. Place patient in a supine position.3. Apply ultrasound gel to patient's lower abdomen region.4. Begin by placing transducer just above the patient's symphysis pubis and midline.5. In sagittal, image the uterus including the fundus, body, and cervix. Take an AP measurement and a long measurement from the fundus to the cervix.6. Image the lower uterine segment with optimal demonstration of the cervix, vagina, and posterior cul-de-sac.7. In transverse, and midline, angle slightly above the symphysis pubis, image the fundus. Angle posteriorly and image the cervix. Measure the width of the uterus at mid-corpus.8. In sagittal, locate gestational sac. A maximum measurement of the gestational sac should be documented with transverse measurements to obtain mean sac diameter.9. In transverse, measure gestational sac orthogonally (AP and transverse)<ol style="list-style-type: none">a. Locate fetal pole. Measure from crown to rump (crown-rump length) and yolk sac.b. Document presence or absence of fetal heart motion. If positive, measure fetal heart rate.10. In sagittal, angle to the right of the uterus to image the right ovary and measure the dimension.11. Rotate the transducer to transverse and image the long-axis of the right ovary with measurement (long-axis and AP).12. Move the transducer back to midline and in sagittal, angle left to image the left ovary and measure.13. Rotate the transducer to transverse and image the long-axis of the left ovary with measurement (long-axis and AP).14. If follicles exceed 10mm in size, measure the diameter of the largest follicle.15. While scanning the ovaries, survey the adnexal region for abnormalities. If an adnexal mass is identified, measure the mass, and document if cystic, solid or mixed, as well as its location in relationship to the ovaries and uterus.16. If no fetal pole was in the uterus, check adnexa carefully to rule out ectopic pregnancy.

17. Scan the cul-de-sac and bowel area posterior to the uterus for the presence of free fluid or a mass. If a mass is identified, measure the mass, and document if cystic, solid or mixed, as well as its relationship to the ovaries and uterus.
 - a. Identification of peristalsis can help distinguish a loop of bowel from a pelvic mass.
18. Placental location should be recorded and its relationship to the internal cervical os. Image entire placenta, paying special attention to the margins.

FIRST TRIMESTER TRANSVAGINAL OBSTETRICAL EXAM

- 1) Proceed with introductions, explanations and patient comfort.
- 2) Obtain complete patient history, including last menstrual period, current and past symptoms, recent laboratory and other test results, and relevant risk factors. Enter patient data into real-time scanner.
- 3) Select obstetric set up or other appropriate machine settings.
- 4) Place patient in supine position with feet in stir-ups, or with a pillow under the patient's lower back and knees bent.
- 5) Cover the transducer with a probe cover. Use a lubricant such as K-Y jelly or saline on the outside of the probe cover.
- 6) Instruct the patient to insert the transducer into their vagina about 3 to 4 inches.
- 7) Proceed with #7 through #20 of previous section: Procedure for first trimester transabdominal obstetrical exam.