

AUSTIN RADIOLOGICAL ASSOCIATION  
ULTRASOUND PROTOCOLS

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**Procedure Name:**                    **OB 1<sup>st</sup> Trimester**

Updated 10/12/15

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**Indications:**

May include but not limited to rule-out ectopic pregnancy, question of gestation age, bleeding with positive pregnancy test, fetal viability, question of number of gestations, evaluate pelvic mass, pelvic pain, follow up of prior pelvic ultrasound, or for any other valid medical reason.

**General Description:**

This is a survey of the female pelvis which will include examination of: the possible embryo, uterus, right and left ovaries, and adnexal regions. To further delineate embryonic structures, heart rates, and pelvic structures, a transvaginal pelvic ultrasound may be requested by the radiologist.

**Patient Preparation:**

The patient's urinary bladder must be adequately distended (cover length of normal size uterus) for the exam. This typically requires drinking at least 32oz. of water 30-45 minutes prior to the exam.

**Equipment Selection and Settings:**

Select pelvis from preset menu for transabdominal exam.

Select EV from preset menu for transvaginal exam.

For transabdominal exam, a curvilinear 4.0MHz probe will be used for most patients (select appropriate probe for pedi or small body habitus). For transvaginal exam an EV-8C4 probe (adults) will be used. The sonographer should use the preprogrammed setting for the appropriate body part and adjust gain, depth, and transmit zone settings to optimize images. Fill out any applicable impression or worksheet upon completion of exam.

**Imaging Sequence:**

The following image sequence is for a normal exam. Include additional images of pathology to demonstrate dimensions in three planes, texture, size, shape and relationship to adjacent anatomy. If there are multiple uterine fibroids or ovarian cysts, label these 1, 2, 3 etc. to correspond with worksheet labels. Include hepatorenal space (Morrison's pouch) image when appropriate to r/o free fluid in the abdomen. Utilize color doppler as needed to help aid in the determination of any abnormality and demonstrate blood flow, while following ALARA principle.

1. Image patient data (include LMP and pregnancy history)
2. Long Uterus mid
3. Long Uterus lower segment/cervix/vagina

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4. Long Uterus mid (length and AP measurement)
5. Long Endometrium measurement if applicable
6. Color Doppler evaluation of the endometrium required when retained products of conception is in question (i.e. postpartum bleeding, abortion)
7. Trans Uterus mid (transverse measurement)
8. Long Uterus midline to RT
9. Long Uterus midline to LT
10. Trans Uterus cervix to fundus
11. Long RT ovary (length and AP measurement)
11. Trans RT ovary (transverse measurement)
12. Long LT ovary (length and AP measurements)
13. Trans LT ovary (transverse measurement)

Identify, document and measure as necessary

14. Measure gestational sac with three dimensions
15. Identify number of gestations
16. Absence or presence of cardiac activity and measure heart rate using M-mode only
17. Measure crown-rump length (at least 2 images and average them)
18. Image yolk sac if seen
19. A transvaginal exam may be necessary to document and obtain images of the fetus