

EARLY FIRST TRIMESTER OBSTETRICAL ULTRASOUND PROTOCOL

For up to 10w6d GA

UW Medicine

BILLING CODES:

UOB1 – Singleton pregnancy
UOB1TWIN – Twin pregnancy

[BILLING CODES FOR
MULTIPLES – CLICK HERE](#)

UOBFU (or UOBF1) to be used on follow up exams if a UOB1 has already been charged in this pregnancy.

UOBTV to be added when transvaginal exam performed. *TV to be done on all pregnancies < 9 weeks gestational age, if abnormality suspected, or if otherwise indicated.*

***If no definite intrauterine pregnancy is visualized, or ectopic pregnancy is questioned, evaluation following the ectopic protocol is necessary. Refer to Ectopic Pregnancy Evaluation requirements below.*

**See separate [FETAL DEMISE PROTOCOL](#) for contact information and imaging requirements.

**If no evidence of intrauterine or extrauterine pregnancy, use the pelvic report on Viewpoint and include uterine measurements.

DATING: As a routine, use the date provided by the clinician or patient's known LMP. Working EDD in EPIC should be used if more than one date is provided. Use AIUM and ACOG dating criteria if dating is unknown.

PATIENT PREP: Please have patient come with full bladder.

TRANSABDOMINAL IMAGES TO OBTAIN

MATERNAL STRUCTURES -

UTERUS/MYOMETRIUM:

- Sagittal image showing size, shape, and orientation of uterus.
- Sagittal cine sweep of uterus evaluating for contour changes, echogenicity, fibroids, and masses. *Depth and field of view should be set to visualize area superior to fundus and posterior cul de sac for pedunculated or other extra uterine anomalies.*
- Transverse/Coronal image size, shape, and orientation of uterus.
- Additional cine sweeps if abnormality seen.
- Document any abnormality and measure in three dimensions.

Measuring fibroids: See FIGO classification chart below.

- Measure 2 largest fibroids and report location.
- Measure additional fibroids if they are submucosal or pedunculated.
- If the indication for exam is bleeding, also measure any submucosal fibroids regardless of size.

ADNEXA:

- Transverse image of right and left adnexa.
- Cine clip in sagittal and transverse of right and left adnexa.

**** See ECTOPIC PREGNANCY evaluation section below for extra cines if suspected. ****

OVARIES:

- Sagittal image of right and left ovary with and without measurements in long and AP.
- Transverse image of right and left ovary with and without width measurement.
- Additional cine sweeps if abnormality seen.
- Document any abnormality and measure in three dimensions.
- Displacement cine clips - When it is unclear if a mass or cyst is paraovarian or ovarian in nature, apply pressure with the transvaginal probe to displace the structures. Watch for whether the ovary and area of concern move together or separate.

EMBRYO & STRUCTURES UP TO 10 WEEKS 6 DAYS

- **CRL** - Measured three times.
- **HEART RATE** - Establish presence or absence of fetal cardiac motion with M-mode. If no FHM is present, document slow cine clip sweeping through CRL and color image over CRL.
- **GESTATIONAL SAC** - document until 11 weeks
 - Measure the gestational sac in 3 dimensions.
 - Cine clip through the entire gestational sac to show the CRL and yolk sac.
- **YOLK SAC** - Measure AP diameter of yolk sac.
- **MUTLIPLS** - If there are multiples document number, location and chorionicty.
- **CINE CLIP** in sagittal and transverse if any abnormalities are seen.

TRANSVAGINAL IMAGES TO OBTAIN

***To be done on all pregnancies < 9 weeks gestational age, if abnormality suspected, or if otherwise indicated.
Sterile or bacteriostatic gel packs and single use covers to be used for all transvaginal imaging***

*****REPEAT ALL IMAGES LISTED ABOVE WITH TRASNVAGINAL IMAGING*****

ACUTE PAIN <6DAYS:

SPECTRAL DOPPLER IMAGING: To be used on the ovaries in cases of acute pain less than <6 days, not for cases of chronic pain greater than a week.

- Presence of arterial and venous blood flow
- Billing code to be added:

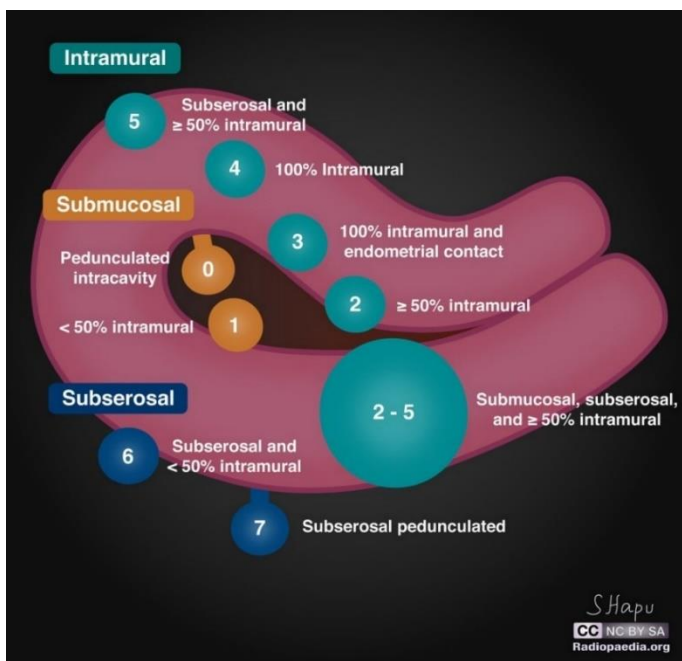
UORGDC if arterial and venous flow is seen.

UORGDL if only arterial OR venous flow is seen.

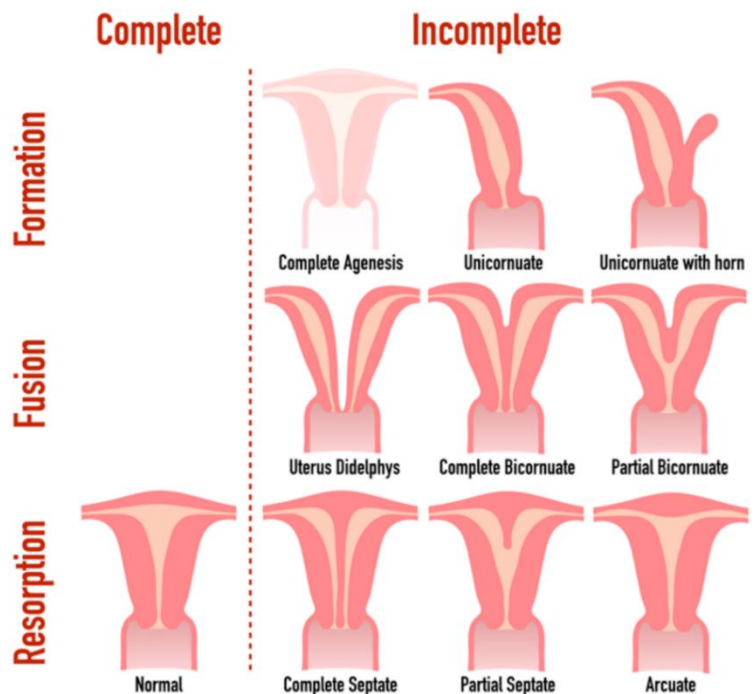
ECTOPIC PREGNANCY EVALUATION - If no definite intrauterine pregnancy is identified, or if ectopic pregnancy is suspected, evaluation following the ectopic protocol is required. Billing codes to be used **UOB1 and UOBTV**.

- At least 2 cine clips in sagittal and 2 in transverse of right and left adnexa.
- Cine clip using color flow sweeping slowly through right and left adnexa looking for hypervascular areas or ring of fire which is classically seen with ectopic pregnancies.
- Perform 3D of the uterus if cornual/interstitial ectopic pregnancy is suspected and save 3D data and 3D sweep.
- Measure any mass or abnormality seen.
- Displacement cine clips - When it is unclear if a mass or cyst is paraovarian or ovarian in nature, apply pressure with the transvaginal probe to displace the structures. Watch for whether the ovary and area of concern move together or separate.
- Document free fluid and note if debris seen within.

FIGO CLASSIFICATIONS



UTERINE MALFORMATIONS



EARLY FIRST TRIMESTER PROTOCOL IMAGE LIST

>10wks 6d GA

IMAGE	MODE
TRANSABDOMINAL	TRANSABD
UT Sag Mid	2D
UT Sag R-L Cine	Cine
UT Trans Mid	2D
<i>Fibroids (measure largest 2 and any submucosal or pedunculated)</i>	2D +
Rt Adnexa Trans	2D
Rt Adnexa Trans S-I Cine	Cine
Rt Adnexa Sag M-L Cine	Cine
Rt Ov Sag	2D
Rt Ov Sag w/ length and height measurements	2D ++
Rt Ov Trans	2D
Rt Ov Trans w/ width measurement	2D +
Lt Adnexa Trans	2D
Lt Adnexa Trans S-I Cine	Cine
Lt Adnexa Trans M-L Cine	Cine
Lt Ov Sag	2D
Lt Ov Sag w/ length and height measurements	2D ++
Lt Ov Trans	2D
Lt Ov Trans w/ width measurement	2D +
CRL x3	2D +
Heart Rate	Mmode
Gestational Sac Sag w/ measurements	2D +
Gestational Sac Trv w/ measurements	2D +
Gestational Sac Sag cine clip	Cine
Yolk Sac w/ AP measurement	2D +
<i>Multiples – number, chronicity, and location</i>	<i>Cine / 2D</i>
<i>Cine clip of any abnormalities</i>	
TRANSVAGINAL	TRANSVAG
Repeat above images if <9wks, abnormality suspected or otherwise indicated	

EARLY FIRST TRIMESTER ULTRASOUND PROTOCOL HISTORY

	Date	Changes made	By whom
Updated	11/20/2020		Becky Marion
Updated	5/1/2022	Format change Ectopic Pregnancy sweeps added	Renee Betit Fitzgerald
Updated	10/15/2022	Removed 3D for cervical and c-section scar ectopic, still need 3D for cornual ectopic	Renee Betit Fitz
Updated		Added FIGO charts. Removed 3D for cervical and c-section preg	
Reviewed		-Added Nasal bone for 11-15weeks -Added use pelvic report if no evidence of IUP or extrauterine pregnancy seen. UT measurements to be included. -Added incidental increased NT requirements -Added to do ovarian dopplers for ectopic eval if pain <6 days -Added displacement clips for paraovarian mass/cyst	Protocol Meeting 3/23 Attendees: Manjiri Dighe Ken Linnau Shaun Bornemeier Dalene Edden Katie Toth Becky Marion Renee Betit Fitz
Added	5/23/2023	If no definite intrauterine pregnancy is visualized, <i>or ectopic pregnancy is questioned</i> , evaluation following the ectopic protocol is necessary	Renee Betit Fitzgerald
Reviewed	1/25/2024	-Separated >11wks and <10w6d protocols -Changed Fetus to Embryo per SRU Consensus & SMFM definitions -No image additions -Changed: Measure 2 largest fibroids (from 3) -Removed duplication of image description in -TV section and stated "Repeat of all transabdominal images listed above" instead -Added image list	Protocol Meeting Attendees: Manjiri Dighe Edith Cheng Kim Ma, Jane Hitti, Michael Richley, Shaun Bornemeier, Dalene Edden, Becky Marion, Renee Betit Fitz