

FIRST TRIMESTER OBSTETRICAL ULTRASOUND PROTOCOL

For 11wks -14w6d GA

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. *Transvaginal imaging to be done if abnormality suspected or otherwise indicated.*

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

****See separate [NUCHAL TRANSLUCENCY PROTOCOL](#) if ordered. NT measurements will not be included in a first trimester exam unless stated on the order. See extra images to acquire if nuchal translucency is incidentally suspected to be increased.**

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

*****Transvaginal images to be included if abnormality suspected or otherwise indicated.***

MATERNAL STRUCTURES –

CERVIX:

- Sagittal image of cervix.
- Transverse/Coronal image of cervix.
- Orientation and evaluation of cervical masses.

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.

PLACENTA:

- Sagittal and transverse image of placenta

ADNEXA:

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

OVARIES:

- Sagittal image of right and left ovary without measurements.
- Sagittal measurement of the right and left ovary in long and AP.
- Transverse image of right and left ovary without measurements.
- Transverse width measurement of the right and left ovary.
- Additional cine sweeps if abnormality seen.
- Document any abnormality and measure in three dimensions.

FETAL STRUCTURES 11-15 WEEKS

- **CRL** – Measured three times.
- **HEART RATE** -Establish presence or absence of fetal cardiac motion with M-mode. *If no FHM is present*, include images of a slow cine clip sweep through CRL and color image over CRL. Two observers are preferred to verify lack of FHM if available.
- **CHOROID PLEXUS** - Document the head in cross section showing both the choroid plexuses and ossified calvarium.
- **TRANSVERSE CINE SWEEP OF CRANIAL STRUCTURES** to evaluate thalami, cerebral peduncles, 3rd vent, aqueduct of Sylvius and posterior fossa
- **SAGITTAL MIDBRAIN**- 3 lines/spaces view showing the thalami, brainstem, posterior fossa and 4th ventricle/intracranial translucency.
- **NUCHAL AREA** - Subjective measurement of nuchal translucency, if this area appears increased see additional images to obtain below.
- **NASAL BONE** – show presence or absence of nasal bone in profile view.
- **STOMACH** - Document abdomen in cross section showing left sided stomach.
- **BLADDER** – Document area of fetal bladder. Report as not well seen if not distended.
- **3VC** – Color image at bladder showing presence of 3 umbilical cord vessels.
- **CORD INSERTION** -Note: *Physiologic Bowel in the 1st Trimester: >7mm in diameter. In normal embryos you will see an echogenic mass almost always 8.5-10.5 weeks, sometimes 10.5 –12.0 weeks. And virtually never in a >12.0 weeks. If there is an echogenic mass protruding prominently, measure it. If its >7mm, rescan at 13 weeks.*
- **EXTREMITIES** –
 - Right and left lower extremities.
 - Right and left upper extremities.
- **MUTLIPLS** -If there are multiples document number, location and chorionicty.
- **CINE CLIP** in sagittal and transverse if any abnormalities are seen.

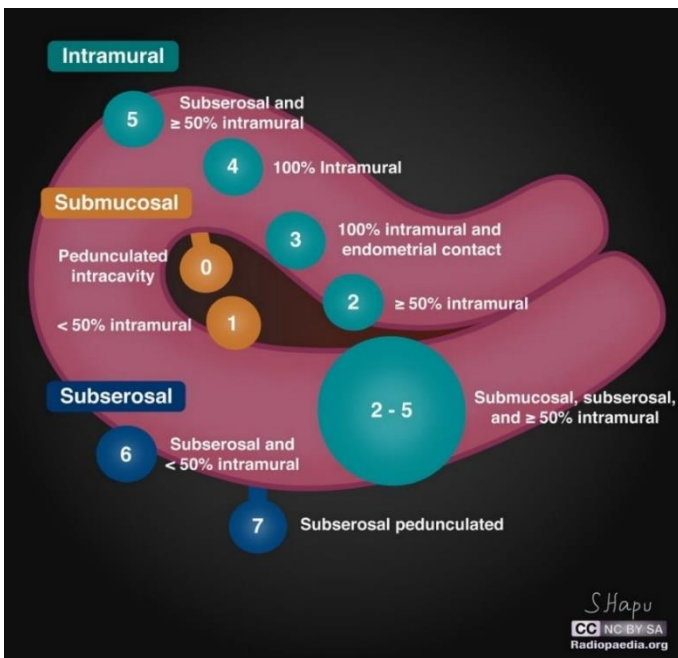
IF AN INCREASED NUCHAL TRANSLUCENCY IS SUSPECTED

Include the following images:

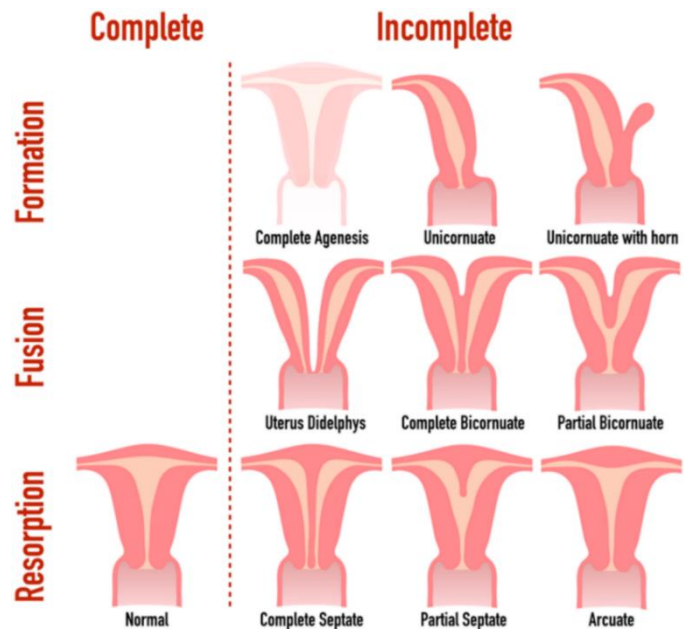
- Subjective measurement of nuchal translucency. To be taken in a long axis and should meet as many requirements of an NT measurement as possible, even if operator is not NT certified. (See separate Nuchal Translucency Protocol for requirements.)
- Cine clip of the fetus in motion showing the nuchal area to prove it is not the amnion being measured.
- Transverse image of the cranium showing the nuchal area, looking for septations and cystic hygroma.
- Cine clip in sagittal through the entire fetus.
- Cine clip in transverse through the entire fetus.
- Perform transvaginal imaging if needed for better visualization.

****Transvaginal images to be included if abnormality suspected or otherwise indicated.**

FIGO CLASSIFICATIONS



UTERINE MALFORMATIONS



FIRST TRIMESTER IMAGE LIST
11-14wk 6d GA

IMAGE	MODE
TRANSABDOMINAL	TRANSABD
Cervix Sag	2D
Cervix Trans	2D
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 +
Placenta Sag	2D
Placenta Trans	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	M-Mode
Choroid Plexus	2D
Trans cine sweep of brain	Cine
Sagittal midbrain	2D
Nuchal Area	2D
Nasal Bone	2D
Stomach	2D
Bladder	2D
3VC	Color
Cord Insertion	2D
Extremities	2D
<i>Multiples – number, chronicity, and location</i>	<i>Cine / 2D</i>
<i>Cine clip of any abnormalities</i>	
REPEAT W TRANSVAGINAL IF NEEDED	TRANSVAG

FIRST TRIMESTER OB ULTRASOUND PROTOCOL HISTORY 11wk-14w6d

	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	3/23/2023	-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: Measure 2 largest fibroids (from 3) Added: Placenta images Added: 3VC color image Added: Sagittal midbrain Added: Nuchal area – subjective assessment Added: Trv cine sweep of head 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