OBSTETRICAL ULTRASOUND
LIMITED OB PROTOCOL

BILLING CODE: UOBL

THIS EXAM SHOULD BE USED FOR:

- **Completion of anatomy <3 wks from last biometry**
- **Limited evaluations of placenta for location**
- **Limited anatomy evaluations**
- **Biometry is not required but may be included in an UOBL**

PREP: No Prep

****Requisitions should be read carefully to ensure the proper exam is performed.**

**** See separate protocols for OB Basic and Detailed Anatomy, OB Follow Up exams and specialty OB exams.**

**** See specialized protocol for TTTS (Twin to Twin Transfusion Syndrome) and TAPS (Twin Anemia Polycythemia Sequence) for all mono-di and mono-mono pregnancies.**

****If *Biometry* is requested, or if it has been greater than 3 weeks since last biometry was done: Use OB Follow Up protocol. Growth will be done after 3 weeks unless it clearly states not to.**

****If a patient has not been seen within our system and is referred to us for a limited exam or follow up growth, the provider must indicate where the anatomy study was completed and be clear that we do not need to repeat it. If the anatomy study was not completed at the outside facility, we cannot do partial anatomy surveys and must repeat a basic or detailed anatomy assessment if asked to follow up on unseen anatomy.**

DATING: Refer to dates used on previous ultrasound or Working EDD listed in EPIC.

IMAGES TO OBTAIN

UTERUS: *if indicated*

- Follow up fibroids if previously seen.
- New or incidental findings should also be imaged.

ADNEXA AND OVARIES: *if indicated*

- Follow up cysts or masses if previously seen.
- New or incidental findings should also be imaged.

CERVIX:

TRANSABDOMINAL IMAGING

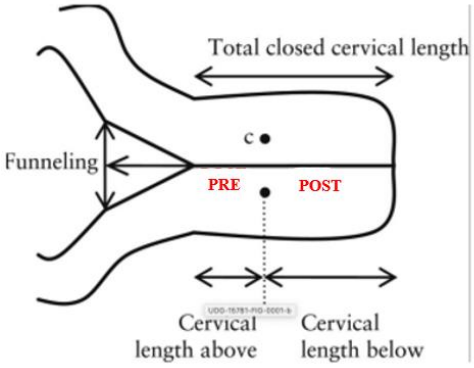
- To be measured transabdominally on all pregnancies less than 24 weeks GA. Normal cervical length is greater than 3.0 cm before 24 weeks.
- Color Doppler image of the LUS to assess for vasa previa.
- If you suspect vessels are present, or are unable to see the cervix without fetal parts obscuring the area, a transvaginal imaging study should be performed.

TRANSVAGINAL IMAGING

STERILE OR BACTERIOSTATIC GEL PACKS AND SINGLE USE COVERS TO BE USED FOR ALL TRANSVAGINAL IMAGING.

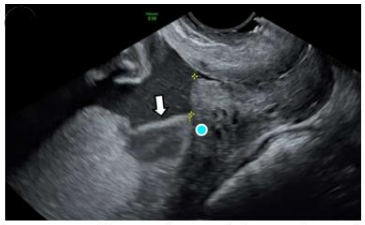
******Verbal consent to be obtained from the patient for transvaginal imaging. Documentation of consent to be included in report. If a male sonographer is doing the scan, there will need to be a female chaperone present for the transvaginal or translabial portion of the exam.***

- If the cervix appears shortened or funneled before 24 weeks, or if a cervical length is specifically the requested, a transvaginal ultrasound should be performed, and the following should be documented. (*A translabial study can be done in place of transvaginal imaging in cases of PPROM, bulging membranes or patient request/refusal of TV.)*
  - Total cervical length
  - Closed length of cervix
  - Open length of funneling if present. Greater than 50% open length of cervix is associated with higher risk of preterm delivery.
  - Assess whether the cervix is dynamic by observing for changes for at least 2 minutes. Images should be taken at the beginning and end of this period to document the time spent. If the cervix is dynamic, report the shortest closed cervical length.
  - Color Doppler image of the LUS to assess for vasa previa.
  - Sample any vessels seen within 2cm of the cervical os with spectral Doppler to see if they are arterial or venous. If it is an arterial vessel, be sure to also include heart rate measurements to differentiate the fetal blood vessels from maternal vessels by comparing their respective heart rates.
- Transvaginal ultrasound is not needed to evaluate the cervix after 24 weeks. If you find a short or dilated cervix transabdominally during an ultrasound exam, contact the referring provider and inform them of the findings. If the referring provider cannot be contacted, call triage nurse or L&D.
- For cerclage evaluation: Take 2D images, as well as cine sweeps, of the cervix showing suture in transverse and sagittal. Measure the total cervical length AND closed cervical length from stitch to external os. Do not apply fundal pressure or Valsalva with patients that have a cerclage.



PLACENTA:

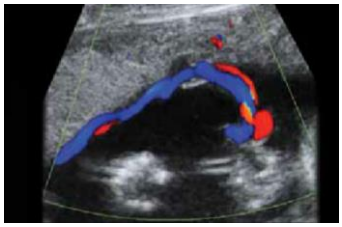
- Document location of placenta in sagittal and transverse.
- Show thickness and echotexture.
- If venous lakes are present, include a color image and a 2D cine clip showing the slow flow movement within.
- Assess for a bi-lobed placenta or succenturiate lobe. If present, document location of connecting vascular supply to the primary placental lobe.
- Assess relationship of placental edge to the internal cervical os to rule out placenta previa.
- Measure the distance from the inferior most portion of the placental tissue if it appears to be low lying. Also include a measurement from the edge of the placental sinus if one is present. A placenta should be described as low lying if it is less than 2 cm from the cervical os, or less than 1.1 cm from the placental sinus.
- Cine clip of any abnormality.
- If accreta is suspected, see additional images needed in separate PAS protocol.



Measurement from a placental sinus to internal os.

PLACENTAL CORD ORIGIN *if previously marginal or velamentous*:

- Document the placental cord origin in transverse and sagittal planes using color Doppler and show the vessels of the cord separating into the placenta. To rule out a velamentous cord origin, the cord should be shown clearly coming out from the placenta, not just coursing along the surface.
- Measure the distance from the cord origin to the edge of the placenta if it appears near the edge. A marginal cord origin is defined as less than 2 cm from placental edge.



FETAL POSITION:

- Document fetal position.

FETAL HEART RATE:

- Measure fetal heart rate with M-Mode. Normal range is 110 – 170 bpm. If the fetal heart rate is above or below, refer to Urgent OB Contact List to contact charge nurse or L&D. If being scanned at an outpatient clinic, contact the referring provider or on call the OB staff for further instructions.

FETAL ANATOMY:

- Stomach
- Bladder
- Kidneys – Sagittal and transverse views. Include length measurements.
- 4 chamber view of heart

AMNIOTIC FLUID VOLUME:

- 20-24 weeks: AFI evaluation should be done using MVP. If abnormal, obtain a four quadrant AFI.
- After 24 weeks, or if appears abnormal before 24 weeks: Evaluation should be done using a four quadrant AFI
- For multiple gestations (twins, triplets, etc): Always measure the MVP unless Mono/mono gestation, then use four quadrant measurements.
- Fluid pockets measured should be greater than 1cm in width.

AFI LEVELS (FOUR QUADRANTS)

<5cm	Oligohydramnios
5-8 cm	Borderline Low
8-20cm	Normal
20-24cm	Borderline High
>24cm	Polyhydramnios

SINGLE MVP AMNIOTIC FLUID LEVELS

<2cm	Oligohydramnios
2-8cm	Normal
>8cm	Polyhydramnios

LIMITED OB IMAGE LIST

MINIMUM IMAGES REQUIRED	MODE
GENERAL	
Placenta Sag -*check if low lying or previa*	2D
Placenta Trans	2D
Cord Origin if previously marginal or velamentous	2D/Color
FHR	M-mode
Presentation	2D
AFI (MVP for 20-24wks, 4 quad >24wks)	2D+
CVX <24wks	2D+
LUS w color	Color
ANATOMY	
4CH	2D
STOMACH	2D
KIDNEYS trv and sag	2D
BLADDER	2D

LIMITED OB PROTOCOL HISTORY

	Date	Changes made	By whom
Created	5/1/2022		Renee Betit Fitzgerald
Changed	5/5/2023	Cerclage image was incorrect. Pre and Post labels revised. Removed Placenta Accreta section – see specialized protocol	OB Protocol meeting 4/27/23 Dighe, Cheng, Ma, Hitti, Shaun, Renee, Dalene
Added	4/17/2024	Image Lists	Renee Betit Fitzgerald
Added	10/15/2024	If the cervix is contracted on transvaginal imaging, wait at least 2 minutes for the contraction to pass. Document an image at the beginning of scanning and after 2 minutes to verify this was done.	Renee Betit Fitzgerald
Added	1/23/2025	Added AFI MVP for 20-24wks, do 4 quad if abnormal.	Combined Protocol Meeting MFM/RAD Attendees: 1/23/25 E Cheng, M Dighe, K Ma, M Richley, S Swati, C Cheng, S Bornemeier, B Marion, R Betit Fitzgerald, P Thompson
Added	2/12/2025	Added: **CERVIX** - A translabial study can be done in place of transvaginal imaging in cases of PPROM, bulging membranes or patient request/refusal of TV. -Assess whether the cervix is dynamic by observing for changes for at least 2 minutes. -Color image of the LUS to assess for vasa previa. -Sample any vessels seen within 2cm of the cervical os with spectral Doppler to see if they are arterial or venous. If it is an arterial vessel, be sure to also include a HR measurement to differentiate the fetal blood vessels from maternal vessels by comparing their respective heart rates.	Manjiri Dighe Renee Betit Fitzgerald
Added	2/12/2025	**PLACENTA** -If venous lakes are present, include a color image and a 2D cine clip showing the slow flow movement within. -Assess for a bi-lobed placenta or succenturiate lobe. If present, document location of connecting vascular supply to the primary placental lobe. -Document the placental cord origin in transverse and sagittal planes using color Doppler and show the vessels of the cord separating into the placenta. To rule out a velamentous cord origin, the cord should be shown clearly coming out from the placenta, not just coursing along the surface.	Manjiri Dighe Renee Betit Fitzgerald