

## OBSTETRICAL ULTRASOUND Second Trimester

### MATERNAL SURVEY:

Image uterus showing fetal lie, placenta location and quantitative estimate of amniotic fluid volume.

Document and measure fibroids.

Image ovaries/adnexa and cervix.

### FETAL BIOMETRY:

*Biparietal diameter* is measured at the level of the thalami and cavum septi pellucidi or columns of the fornix. The cerebellar hemispheres should not be visible in this plane. The measurement is taken from the outer edge of the proximal skull to the inner edge of the distal skull.

*Head circumference* is measured at the same level as the biparietal diameter, around the outer perimeter of the calvarium.

*Femoral diaphysis length* can be reliably used after 14 weeks gestational (menstrual) age. The long axis of the femoral shaft is most accurately measured with the beam of insonation perpendicular to the shaft, excluding the distal femoral epiphysis.

*Abdominal circumference* is measured at the skin line on a true transverse view at the level of the junction of the umbilical vein, portal sinus and fetal stomach.

### FETAL ANATOMICAL SURVEY:

#### *HEAD:*

Cavum septi pellucidi (Same plane as cerebellum.)

Midline falx

Lateral ventricles (Normal @ atrium of downside vent. is  $< 10$  mm)

Choroid plexus (Mention all cysts including honeycomb-appearance. Do not need to measure.)

Cerebellum

Cisterna magna (Normal is  $< 10$  mm)

Posterior nuchal fold (Measure @ 15 - 20 weeks 6 days GA)

Profile w/nasal bone

Upper lip (Coronal. Include axial with pathology.)

#### *HEART:*

Four-chamber view

Right ventricular outflow tract

Left ventricular outflow tract

Interventricular septum

Heart rate

Dual screen - TRV 4-chamber heart showing apex toward left  
TRV fetal abdomen level of stomach

#### *ABDOMEN:*

Stomach

Diaphragm (Coronal, Right & Left Longitudinal)

Kidneys (Long/Coronal & Transverse)

Abnormal dilated renal pelvis:  $\geq 4$  mm in  $< 21$  weeks  
 $\geq 5$  mm in 21-26 weeks  
 $\geq 7$  mm in 26-40 weeks

Anterior abdominal wall

Fetal umbilical cord insertion

3 vessel cord

Umbilical arteries around the bladder using color Doppler

Bladder

Gender

FETAL ANATOMICAL SURVEY con't:

*SPINE:*

Cervical, thoracic, lumbar and sacral (Long, Trans & Coronal)

*EXTREMITIES:*

Bilateral femurs, tibia/fibulas, feet

Bilateral humeri, radius/ulnas, hands.