



OBSTETRICAL ULTRASOUND

Tampa General Hospital (Genesis Clinic)

Rotation Director: Claude Guidi, M.D.

General Goals: On this rotation, the resident will learn to perform and interpret obstetrical ultrasound performed on both routine and high risk women. While gynecologic and first trimester obstetrical ultrasound is also incorporated into the general TGH ultrasound rotation, this rotation will provide the upper level resident with exposure to ultrasound studies done during all three trimesters of pregnancy.

Daily Work: The obstetrical ultrasound rotation is done at Tampa General Hospital's Genesis Clinic at Healthpark located which is located at 5802 N. 30th Street. The assigned resident should contact the Genesis Clinic regarding the weekly schedule for examinations. The resident should participate in scanning with the technologist as well as in image review and interpretation by the obstetrician. At times when there are no scheduled examinations, the resident should spend time reading a textbook and reviewing obstetrical ultrasound teaching file cases.

Suggested Reading:

- PW Callen. Ultrasonography in Obstetrics and Gynecology (5th Edition).

Educational Goals and Objectives:

Fourth Year Resident

Patient Care:

- Perform a proficient basic obstetrical ultrasound examination

Medical Knowledge:

First Trimester Ultrasound

- Normal findings: gestational sac appearance, size, gestational sac growth, yolk sac, embryo, cardiac activity including normal embryonic heart rate, amnion, chorion, normal early fetal anatomy/growth, crown-rump length measurement, correlation with BHCG levels and menstrual dates

- Multiple gestations (chorionicity and amnionicity), failed early pregnancy, spontaneous complete/incomplete abortion, ectopic pregnancy, blighted ovum, embryonic death, subchorionic hematoma, gestational trophoblastic disease, gross embryonic structural abnormalities, anencephaly
- Unusual ectopic pregnancy: interstitial, cervical, ovarian, scar, abdominal, rudimentary horn
- Nuchal translucency
- Chorionic villous sampling

Second and Third Trimester Ultrasound

- Normal findings: normal fetal anatomy/situs/development, placenta, biometry, amniotic fluid volume, multiple gestations
- Anencephaly
- Oligohydramnios (spontaneous premature rupture of membranes, renal disease, fetal death, intrauterine growth retardation, infection)
- Polyhydramnios, placenta previa
- Cervical appearance and length
- Recognition of fetal abnormalities that require high risk obstetrics referral, including intrauterine growth retardation, hydrops, holoprosencephaly, hydrocephalus, neural tube defects, multicystic dysplastic kidney, hydronephrosis
- Placental abruption, placental masses, two-vessel umbilical cord, cord masses, retained products of conception
- Recognition of fetal abnormalities that require high risk obstetrics referral, including congenital anomalies/chromosomal abnormalities and syndromes such as Down's syndrome and Turner's syndrome, hydrops, congenital infections, chest masses, cardiac malformations and arrhythmias, diaphragmatic hernia, abdominal wall defects, abdominal masses, gastrointestinal tract obstruction/abnormalities, ascites, skeletal dysplasias, cleft lip/palate, complications of twin pregnancy, hydrancephaly
- Borderline findings: nuchal thickening, choroid plexus cyst, echogenic cardiac focus, echogenic bowel, borderline hydrocephalus
- Placental cord insertion site/vasa previa, velamentous cord insertion, cord prolapse, succenturiate placenta, cervical incompetence
- Umbilical cord Doppler, fetal cranial Doppler, biophysical profile
- Guidance for amniocentesis
- Placenta accreta, percreta, increta

Interpersonal and Communication Skills:

- Appropriately communicate and document urgent or unexpected radiologic findings.
- Produce radiologic reports that are accurate, concise and grammatically correct.

Practice-Based Learning and Improvement:

- Efficiently use electronic and print resources to access information.
- Demonstrate knowledge of cost-effective imaging practices.
- Demonstrate knowledge of how obstetrical imaging information is integrated with the other parts of the health care system in the treatment of the patient

Professionalism:

- Demonstrate respect for patients and all members of the health care team.
- Respect patient confidentiality.
- Present oneself as a professional in appearance and communication.
- Demonstrate a responsible work ethic with regard to work assignments.

Evaluation: Residents will be evaluated on the above goals and objectives by means of a monthly global evaluation form filled out by the course director. In addition, interpersonal and communication skills and professionalism will be evaluated by the ultrasound technologists. Medical knowledge in obstetrical imaging will be further evaluated by the ACR in-service examination and mock oral board examination.