

ULTRASOUND IN LABOR AND DELIVERY

1. Fetal presentation
2. Fetal number
3. Fetal life
4. Amniotic fluid volume
5. Biophysical Profile
4. Placental location
If looking for placenta previa should be performed when maternal bladder is empty to avoid false positives.
5. Placental Abruption
May only see abruption on ultrasound in 30% of abruption cases, so may confirm but does NOT rule out!! Go with the clinical picture if U/S negative!
6. Fetal Size
There's a large range of error in size estimation, especially in small and large babies! (>14% error). If a GDM baby is > 4500 g or a non-GDM baby is > 5000 g, some OB/GYN physicians will offer delivery by Cesarean section.

ULTRASOUND MACHINE USE:

- Stand at Mom's Right side with the monitor at her head on the Right side as well.
- Transducer – the wide transducer is used in late pregnancy. The side that goes toward mom's Right or Head (horizontally or vertically) always has a marker (a dot). It helps you keep track of where baby is in relation to mom.
- Acoustic window - Fluids such as urine and amniotic fluid allow sound waves to pass freely, acting as a window to the structures beneath or within them.
- Acoustic shadow – Sound waves won't cross tissue-bone and gas-tissue interfaces well, so you get a shadow. (Seen as a triangularly widening dark band) Try another angle.
- Gain and time gain compensation –adjust the gain if your picture is blurry due to mom's body habitus, etc. (Returning echoes are weak and must be amplified generally and selectively by depth within the image to produce a readable image)
- Scanning frequency. 3.0-3.5 MHz is standard with higher frequencies of 5.0-7.5 available. (Higher frequencies give you more detail but don't travel as far.)

Sources: ALSO and Up To Date and FP Ultrasound Conference

*Please be advised that HCMC FM residents/faculty do not have ultrasound privileges at this time. This means you can try the scan, but OB/GYN does the official scan. **Do not document your ultrasound.**