

Maine Medical

PARTNERS

Women's Health

A department of Maine Medical Center

Fetal Monitoring for Nonobstetric Surgery/Procedures

Nonobstetric surgery/procedures may become necessary during pregnancy, which requires discussion among the surgical/procedure team: obstetrics, anesthesia, and nursing.

ACOG guidelines include the following:

- A pregnant patient should never be denied medically necessary surgery, regardless of trimester.
- An obstetric consultation is indicated before nonobstetric surgery or an invasive procedure
- Elective surgery should be postponed until after delivery.
- *If possible*, nonurgent surgery should be performed in the second trimester.

Potential surgery/procedures that may occur during pregnancy include:

- Cholecystectomy
- Appendectomy
- Hernia/bowel surgery
- Orthopedic surgery
- Gastroenterology procedures (endoscopy, colonoscopy, MRCP, ERCP)

Important considerations for all pregnant patients undergoing nonobstetric surgery include (as technically feasible with procedure):

- Position with left lateral tilt if > 20 weeks, in order to reduce aortocaval compression
- Consider betamethasone course for viable premature gestational ages, following MFM consult
- Monitor in the perioperative period for preterm labor
- Screen for venous thromboembolism risk and apply perioperative prophylaxis

The plan for fetal monitoring will depend on gestational age and type of surgery/procedure.

Prior to Viability (Less than 22 0/7 weeks):

- Assess fetal heart rate before and after surgery/procedure, which can be performed by nursing (doptone) or a resident (bedside ultrasound), depending on availability. The Labor & Delivery charge nurse (662-0056) should be notified to help arrange this.

After Viability (22 0/7 weeks* and beyond):

- If intraoperative fetal monitoring is **not** technically feasible (e.g., appendectomy), an NST should be performed prior to, and immediately following the surgery/procedure.
- If intraoperative fetal monitoring is technically feasible (i.e., **not** abdominal surgery), the fetus should be monitored **continuously** throughout the surgery/procedure.
 - The Labor & Delivery charge nurse should be notified **at least 24 hours in advance** (662-0056) of any (anticipated) surgery/procedure
 - The patient should be consented for possible emergency cesarean for fetal indications.
 - A Labor & Delivery nurse will need to be present for continuous monitoring.
 - The covering obstetrician should be aware and readily available.
 - Neonatology should be made aware, with placement of neonatal warmer and resuscitation equipment at the location of the surgery/procedure.
 - A cesarean delivery kit should be available at the location of the surgery/procedure, in case emergency delivery becomes necessary.

**Timing of fetal viability depends on parental wishes' regarding neonatal resuscitation.*

Reference:

ACOG Committee Opinion No. 775, Committee on Obstetric Practice: Nonobstetric Surgery During Pregnancy, April 2019.