INTERIM UPDATE

The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

American Society of Anesthesiologists™

ACOG COMMITTEE OPINION

Number 775

(Replaces Committee Opinion No. 696, April 2017)

Committee on Obstetric Practice
American Society of Anesthesiologists

This Committee Opinion was developed by the American College of Obstetricians and Gynecologists' Committee on Obstetric Practice and the American Society of Anesthesiologists.

INTERIM UPDATE: The content on nonobstetric surgery in this Committee Opinion has been updated as highlighted (or removed as necessary) to reflect a limited, focused change in the language regarding sedative drugs, medically necessary surgery, antenatal corticosteroids, and venous thromboembolism.

Nonobstetric Surgery During Pregnancy

ABSTRACT: The American College of Obstetricians and Gynecologists' Committee on Obstetric Practice acknowledges that the issue of nonobstetric surgery during pregnancy is an important concern for physicians who care for women. Because of the difficulty of conducting large-scale randomized clinical trials in this population, there are no data to allow for specific recommendations. It is important for a physician to obtain an obstetric consultation before performing nonobstetric surgery and some invasive procedures (eg, cardiac catheterization or colonoscopy) because obstetricians are uniquely qualified to discuss aspects of maternal physiology and anatomy that may affect intraoperative maternal–fetal well-being.

The following generalizations may be helpful to guide decision making:

- No currently used anesthetic agents have been shown to have any teratogenic effects in humans when using standard concentrations at any gestational age.
- There is no evidence that *in utero* human exposure to anesthetic or sedative drugs has any effect on the developing fetal brain; and there are no animal data to support an effect with limited exposures less than 3 hours in duration.
- Fetal heart rate monitoring may assist in maternal positioning and cardiorespiratory management and may influence a decision to deliver the fetus.

The following recommendations represent the consensus of the committee:

- A pregnant woman should never be denied medically necessary surgery or have that surgery delayed regardless of trimester because this can adversely affect the pregnant woman and her fetus.
- Elective surgery should be postponed until after delivery.
- Given the potential for preterm delivery with some nonobstetric procedures during pregnancy, corticosteroid administration for fetal benefit should be considered for patients with fetuses at viable premature gestational ages, and patients should be monitored in the perioperative period for signs or symptoms of preterm labor.
- Pregnant women undergoing nonobstetric surgery should be screened for venous thromboembolism risk and should have the appropriate perioperative prophylaxis administered.

When nonobstetric surgery is planned, the primary obstetric care provider should be notified. If that health care provider is not at the institution where surgery is to be performed, another obstetric care provider with privileges at that institution should be involved. If fetal monitoring is to be used, consider the following recommendations:

- Surgery should be done at an institution with neonatal and pediatric services.
- An obstetric care provider with cesarean delivery privileges should be readily available.

- A qualified individual should be readily available to interpret fetal heart rate patterns.

General guidelines for fetal monitoring include the following:

- If the fetus is considered previable, it is generally sufficient to ascertain the fetal heart rate by Doppler before and after the procedure.
- At a minimum, if the fetus is considered to be viable, simultaneous electronic fetal heart rate and contraction monitoring should be performed before and after the procedure to assess fetal well-being and the absence of contractions.
- Intraoperative electronic fetal monitoring may be appropriate when all of the following apply:
  - The fetus is viable.
  - It is physically possible to perform intraoperative electronic fetal monitoring.
  - A health care provider with obstetric surgery privileges is available.
  - When possible, the woman has provided informed consent that allows for emergency cesarean delivery for fetal indications.
  - The nature of the planned surgery will allow the safe interruption or alteration of the procedure to provide access to perform emergency delivery.

In select circumstances, intraoperative fetal monitoring may be considered for previable fetuses to facilitate positioning or oxygenation interventions.

The decision to use fetal monitoring should be individualized and, if used, should be based on gestational age, type of surgery, and facilities available. Ultimately, each case warrants a team approach (anesthesia and obstetric care providers, surgeons, pediatricians, and nurses) for optimal safety of the woman and the fetus.

For More Information

The American College of Obstetricians and Gynecologists has identified additional resources on topics related to this document that may be helpful for obgyns, other health care providers, and patients. You may view these resources at www.acog.org/More-Info/AnalgesiaAnesthesiaDuringPregnancy.

These resources are for information only and are not meant to be comprehensive. Referral to these resources does not imply the American College of Obstetricians and Gynecologists' endorsement of the organization, the organization's website, or the content of the resource. These resources may change without notice.

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