

American Society of Anesthesiologists®

COMMITTEE OPINION

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(Replaces Committee Opinion Number 474, February 2011)

Committee on Obstetric Practice American Society of Anesthesiologists

This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

INTERIM UPDATE: This Committee Opinion is updated to reflect joint publication with the American Society of Anesthesiologists and to include a For More Information link. No other changes have been made.

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. 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. 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.

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.
- 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 indicated surgery, regardless of trimester.
- Elective surgery should be postponed until after delivery.

 If possible, nonurgent surgery should be performed in the second trimester when preterm contractions and spontaneous abortion are least likely.

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 the 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 and willing to intervene during the surgical procedure for fetal indications.
 - When possible, the woman has given informed consent to emergency cesarean delivery.
 - 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 ob-gyns, other health care providers, and patients. You may view these resources at www.acog.org/More-Info/Analgesia AnesthesiaDuringPregnancy.

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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