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Optimal Goals for Anesthesia Care in Obstetrics

Committee on Obstetric Practice

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.

ABSTRACT: A joint statement from the American Society of Anesthesiologists and the American College of Obstetricians and Gynecologists was developed to address issues of concern to both specialties. Good obstetric care requires the availability of qualified personnel and equipment to administer general or regional anesthesia both electively and emergently. The extent and degree to which anesthesia services are available varies widely among hospitals. However, for hospitals providing obstetric care, certain optimal anesthesia goals should be sought.

This joint statement from the American Society of Anesthesiologists and the American College of Obstetricians and Gynecologists has been designed to address issues of concern to both specialties. Good obstetric care requires the availability of qualified personnel and equipment to administer general or regional anesthesia both electively and emergently. The extent and degree to which anesthesia services are available varies widely among hospitals. However, for any hospital providing obstetric care, certain optimal anesthesia goals should be sought as follows:

- I. Availability of a licensed practitioner who is credentialed to administer an appropriate anesthetic whenever necessary. For many women, regional anesthesia (epidural, spinal, or combined spinal epidural) will be the most appropriate anesthetic.
- II. Availability of a licensed practitioner who is credentialed to maintain support of vital functions in any obstetric emergency.
- III. Availability of anesthesia and surgical personnel to permit the start of a cesarean delivery within 30 minutes of the decision to perform the procedure.
- IV. Immediate availability of appropriate facilities and personnel, including obstetric anesthesia, nursing personnel, and a physician capable of monitoring labor and performing cesarean delivery, in-

cluding an emergency cesarean delivery in cases of vaginal birth after cesarean delivery (1). The definition of immediately available personnel and facilities remains a local decision based on each institution's available resources and geographic location.

- V. Appointment of a qualified anesthesiologist to be responsible for all anesthetics administered. There are many obstetric units where obstetricians or obstetrician-supervised nurse anesthetists administer labor anesthetics. The administration of general or regional anesthesia requires both medical judgment and technical skills. Thus, a physician with privileges in anesthesiology should be readily available.

Persons administering or supervising obstetric anesthesia should be qualified to manage the infrequent but occasional life-threatening complications of major regional anesthesia such as respiratory and cardiovascular failure, toxic local anesthetic convulsions, or vomiting and aspiration. Mastering and retaining the skills and knowledge necessary to manage these complications require adequate training and frequent application.

To ensure the safest and most effective anesthesia for obstetric patients, the director of anesthesia services, with the approval of the medical staff, should develop and enforce

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*Women's Health Care
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409 12th Street, SW
PO Box 96920
Washington, DC 20090-6920

written policies regarding provision of obstetric anesthesia as follows:

- I. A qualified physician with obstetric privileges to perform operative vaginal or cesarean delivery should be readily available during administration of anesthesia. Readily available should be defined by each institution within the context of its resources and geographic location. Regional or general anesthesia or both should not be administered until the patient has been examined and the fetal status and progress of labor evaluated by a qualified individual. A physician with obstetric privileges who concurs with the patient's management and has knowledge of the maternal and fetal status and the progress of labor should be readily available to handle any obstetric complications that may arise. A physician with obstetric privileges should be responsible for midwifery back up in hospital settings that utilize certified nurse-midwives and certified midwives as obstetric providers.
- II. Availability of equipment, facilities, and support personnel equal to that provided in the surgical suite. This should include the availability of a properly equipped and staffed recovery room capable of receiving and caring for all patients recovering from major regional or general anesthesia. Birthing facilities, when used for analgesia or anesthesia, must be appropriately equipped to provide safe anesthetic care during labor and delivery or postanesthesia recovery care.
- III. Personnel other than the surgical team should be immediately available to assume responsibility for resuscitation of the depressed newborn. The surgeon and anesthesiologist are responsible for the mother and may not be able to leave her to care for the newborn even when a regional anesthetic is functioning adequately. Individuals qualified to perform neonatal resuscitation should demonstrate:
 - A. Proficiency in rapid and accurate evaluation of the newborn condition, including Apgar scoring
 - B. Knowledge of the pathogenesis of a depressed newborn (acidosis, drugs, hypovolemia, trauma, anomalies, and infection), as well as specific indications for resuscitation
 - C. Proficiency in newborn airway management, laryngoscopy, endotracheal intubations, suctioning of airways, artificial ventilation, cardiac massage, and maintenance of thermal stability

In larger maternity units and those functioning as high-risk centers, 24-hour in-house anesthesia, obstetric, and neonatal specialists usually are necessary. Preferably, the obstetric anesthesia services should be directed by an anesthesiologist with special training or experience in obstetric anesthesia. These units also will frequently

require the availability of more sophisticated monitoring equipment and specially trained nursing personnel.

A survey jointly sponsored by the American Society of Anesthesiologists and The American College of Obstetricians and Gynecologists found that many hospitals in the United States have not yet achieved the goals mentioned previously. Deficiencies were most evident in smaller delivery units. Some small delivery units are necessary because of geographic considerations. Currently, approximately 34% of hospitals providing obstetric care have fewer than 500 deliveries per year (2). Providing comprehensive care for obstetric patients in these small units is extremely inefficient, not cost-effective, and frequently impossible. Thus, the following recommendations are made:

1. Whenever possible, small units should consolidate.
2. When geographic factors require the existence of smaller units, these units should be part of a well-established regional perinatal system.

The availability of the appropriate personnel to assist in the management of a variety of obstetric problems is a necessary feature of good obstetric care. The presence of a pediatrician or other trained physician at a high-risk cesarean delivery to care for the newborn, or the availability of an anesthesiologist during active labor and delivery when vaginal birth after cesarean delivery are attempted and at a breech or multifetal delivery are examples. Frequently, these physicians spend a considerable amount of time standing by for the possibility that their services may be needed emergently but may ultimately not be required to perform the tasks for which they are present. Reasonable compensation for these standby services is justifiable and necessary.

A variety of other mechanisms have been suggested to increase the availability and quality of anesthesia services in obstetrics. Improved hospital design, which places labor and delivery suites closer to the operating rooms, would allow for more efficient supervision of nurse-anesthetists. Anesthesia equipment in the labor and delivery area must be comparable to that in the operating room.

Finally, good interpersonal relations between obstetricians and anesthesiologists are important. Joint meetings between the two departments should be encouraged. Anesthesiologists should recognize the special needs and concerns of obstetricians and obstetricians should recognize anesthesiologists as consultants in the management of pain and life-support measures. Both should recognize the need to provide high-quality care for all patients.

References

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