

Clarification of Anesthesia Standards and Guidelines

Understanding and complying with the guidelines of the American Society of Anesthesiologists will help ensure high-quality patient care, increase levels of patient safety, and minimize medico-legal risk. The author discusses important standards and guidelines for the administration of general anesthesia and sedation/analgesia in the office-based setting and compares the requirements of the different accrediting organizations. (*Aesthetic Surg J* 2001;21:573-575.)

Currently, 3 national bodies accredit office-based surgery facilities. The American Association for Accreditation of Ambulatory Surgery Facilities (AAAASF) defines 3 classes of facilities on the basis of the type of anesthesia administered: in class A facilities, procedures are performed under local or topical anesthesia; in class B facilities, sedating medication and regional anesthesia are administered; and in class C facilities, general anesthesia is administered by an anesthesiologist or a qualified nonphysician supervised as required by law.

In contrast to AAAASF, the Accreditation Association for Ambulatory Health Care (AAAHC) provides 1 level of accreditation but has specific standards of care based on the level of sedation or anesthesia administered. The Joint Commission on Accreditation of Health Care Organizations (JCAHO) has recently started accrediting office-based surgery facilities, but at press time, guidelines and standards were not available.

The American Society of Anesthesiologists (ASA) has published 31 standards, guidelines, and position papers or statements. Many of these relate to the care of patients receiving anesthesia or sedation for ambulatory or office-based surgical procedures. In October 1999, the ASA adopted new language to define general anesthesia and levels of sedation/analgesia. The AAAHC and JCAHO have adopted the ASA language in their standards and guidelines.¹

Requirements for Anesthesia Providers

The accrediting bodies generally require physician supervision of anesthesia. The ASA states that anesthesiologist participation in all office-based surgery is desirable as a patient safety standard, but it does not oppose regulatory requirements, where necessary, that speak merely in terms of physician supervision provided that the supervising physician is appropriately trained. The AAAASF requires that anesthesia is administered by a qualified physician or a qualified nonphysician supervised by a qualified physician who is appropriately trained. In some states, such physician supervision is not required. The AAAHC requires that those administering anesthesia be properly supervised by credentialed or approved persons.*



Jeffrey L. Apfelbaum, MD, Chicago, IL, is a board-certified anesthesiologist.



P. Allan Klock, Jr., MD, Chicago, IL, is a board-certified anesthesiologist.

Preanesthesia Assessment

All the above organizations require patient assessment by a qualified physician or a physician-supervised, qualified, nonphysician before anesthetization. Assessment should include a review of medical records, a history with attention to past anesthesia problems, and a physical examination. The risks and benefits of the anesthesia plan, as well as alternatives, should be discussed with the patient before obtaining informed consent. The medical record should include documentation of the assessment, informed consent process, and the anesthesia plan.

Intraoperative Care

The accrediting bodies and the ASA require adequate space, lighting, and physical infrastructure for the procedures performed. In addition, they require availability of a reliable source of oxygen; suction; emergency drugs, supplies, and equipment; and a self-inflating hand resuscitator bag capable of administering at least 90% oxygen.

The AAAASF does not distinguish between light and moderate sedation. Otherwise, its requirements are congruous with the AAAHC and ASA standards for moderate-to-deep sedation and regional and general anesthesia as follows: "The patient's oxygenation, ventilation, and circulation must be continually evaluated and documented." Monitors must include continuous electrocardiography, pulse oximetry, and blood pressure determination at frequent intervals (at least every 5 minutes).

Physician Presence

The ASA guidelines for office-based anesthesia state that the anesthesiologist should be present during the intraoperative period and immediately available until the patient is discharged from anesthesia care. The AAAHC requires the presence of another physician, dentist, or qualified person (supervised by a physician or dentist) to administer deep sedation or anesthesia in addition to the surgeon. The AAAASF standards state the following: "The qualified physician who is responsible for supervising the administration of anesthesia or providing anesthesia must be physically present in the operating room throughout the conduct of all anesthetics for class B and C facilities." Administration of general anesthesia requires measurement of end-tidal CO₂ and body temperature.

Advanced Cardiac Life Support

Even though the sedation/analgesia plan may not include general anesthesia, the anesthesiologist, anesthetist, or supervising physician must be able to rescue patients from 1 level of sedation deeper than is planned. Thus, if deep sedation is planned, there must be personnel and equipment to rescue patients from general anesthesia. The current American Heart Association guidelines for advanced cardiac life support suggest that tracheal intubation not be attempted unless the practitioner regularly performs this procedure (a minimum of 6 to 12 times per year).

Alternatives to intubation include an oral airway or other blindly inserted devices, including the laryngeal mask airway (LMA North America, San Diego, CA) or the tracheoesophageal combitube (Tyco Kendall, Mansfield, MA). These devices pose less risk for patients and have higher success rates in the hands of nonanesthesiologists. If tracheal intubation is attempted, the AHA guidelines require use of a nonphysical examination technique to confirm tube position. Such techniques include the self-inflating bulb, such as the AMBU Tube Check-B, (Ambu Inc, Linthicum, MD) or chemical capnography, EasyCap (Life-Assist, Rancho Cordova, CA). Each of these disposable devices costs less than \$15. Alternatively, a portable or fixed capnograph may be used but costs about \$2000. Whatever device is used should be immediately available with other emergency supplies, and appropriate personnel should be familiar with its use.

Backup Oxygen and Electricity

A backup oxygen supply should be available for every patient receiving moderate-to-deep sedation or general anesthesia. The ASA guidelines call for the availability of at least 1 full E cylinder of oxygen in each anesthetizing location.

Emergency power should be available. The AAAASF requires overall backup power for 120 minutes; the AAAHC states emergency power should be "adequate for type of surgery/services being performed...in operative and recovery areas."

Postanesthesia Care, Discharge, and Availability of Appropriate Personnel

A postanesthesia care unit (PACU) or its equivalent must be available for each patient. Patients must be appropriately monitored during their recovery. This usually means at least a pulse oximeter, if not an electrocardiograph, for patients recovering from anesthesia other than light sedation.

Discharge from the PACU or PACU equivalent is a medical decision. Discharge criteria may authorize a qualified nonphysician to discharge. However, the AAAASF guidelines require a physician to be available while a patient is in the PACU. The AAAHC guidelines differ: "a person qualified to provide anesthesia and resuscitative services

is available until the patient has been discharged from anesthesia care.” The ASA guidelines go further: “personnel with training in advanced resuscitative techniques (for example, ACLS [advanced cardiac life support], PALS [pediatric advanced life support]) should be immediately available until all patients are discharged home.”

Office-based anesthesia has enjoyed an excellent safety record. Understanding and complying with the appropriate guidelines and standards will help ensure high-quality patient care, high levels of patient safety, and will minimize medico-legal risk. ■

**Editors Note: Certified registered nurse anesthetists also provide anesthesia in office-based surgical facilities*

and freestanding ambulatory surgery centers. The American Association of Nurse Anesthetists (AANA) promotes standards of care in these settings congruent with the AANA Scope and Standards of Nurse Anesthesia Practice.

Reference

1. A complete listing of American Society of Anesthesiologists standards and guidelines may be obtained at www.asahq.org/Pubs/sgstoc.htm.

Reprint requests: P. Allan Klock, Jr., MD, Department Of Anesthesia and Critical Care, University of Chicago Hospitals, MC 4028, 5841 S. Maryland Avenue, Chicago, IL 60637.

Copyright © 2001 by The American Society for Aesthetic Plastic Surgery, Inc.

1084-0761/2001/\$35.00 + 0 **70/1/120897**

doi:10.1067/maj.2001.120897