

HIGH DESERT HEALTH SYSTEM AMBULATORY SURGICAL CENTER

SUBJECT: VI-123 STANDARD OF BASIC ANESTHESIA CARE, INCLUDING MONITORING	POLICY #: 1158
	VERSION: 2
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DATE APPROVED: 09/29/2017	

PURPOSE: To define the standards for basic (minimum) anesthesia monitoring during all anesthesia care involving anesthesia staff.

POLICY: The Ambulatory Surgical Center (ASC) requires compliance with the "Standards for Basic Anesthesia Monitoring" (attachment). Additional monitoring may be required for select patients as determined by the patient's medical condition, at the discretion of the anesthesiologist.

These standards apply to all anesthesia care although, in emergency circumstances, appropriate life support measures take precedence. These standards may be exceeded at any time based on the judgment of the responsible anesthesiologist. They are intended to encourage quality patient care, but observing them cannot guarantee any specific patient outcome. They are subject to revision from time to time, as warranted by the evolution of technology and practice. They apply to all general anesthetics, regional anesthetics and monitored anesthesia care. This set of standards addresses only the issue of basic anesthesia monitoring, which is one component of anesthesia care. In certain rare or unusual circumstances, 1) some of these methods of monitoring may be clinically impractical, and 2) appropriate use of the described monitoring methods may fail to detect untoward clinical developments. Brief interruption of continual (defined as "repeated regularly and frequently in steady rapid succession" whereas "continuous" means "prolonged without any interruption at any time") monitoring may be unavoidable.

STANDARD I:

Qualified anesthesia personnel shall be present in the room throughout the conduct of all general anesthetics, regional anesthetics and monitored anesthesia care.

Objective

Because of the rapid changes in patient status during anesthesia, qualified anesthesia personnel shall be continuously present to monitor the patient and provide anesthesia care.

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STANDARD II:

During all anesthetics, the patient's oxygenation, ventilation, circulation and temperature shall be continually monitored (see Objectives and Methods in PROCEDURE, # IV).

PROCEDURE:

- I. The management of an anesthetic is dependent on many factors, including the medical conditions of the patients and the procedures to be performed. The anesthesiologist may delegate tasks to the Certified Registered Nurse Anesthetist (CRNA), but should participate in critical parts of the anesthetic and remain immediately physically available for management of emergencies, regardless of the type of anesthetic.
- II. Induction of anesthesia is under the supervision of the anesthesiologist.
- III. A CRNA assigned to a case should alert the assigned anesthesiologist if anything unusual or unsatisfactory is occurring in the patient's condition intraoperatively.
- IV. Methods for evaluation of patient vital functions include, but are not limited to, the following:

A. OXYGENATION:

Objective

To ensure adequate oxygen concentration in the inspired gas and the blood during all anesthetics

Methods

1. Inspired gas: During every administration of anesthesia using an anesthesia machine, the concentration of oxygen in the patient breathing circuit shall be measured by an oxygen analyzer with a low oxygen concentration limit alarm in use.*
2. Blood oxygenation: During all anesthetics, a quantitative method of assessing oxygenation such a pulse oximetry shall be employed.* When the pulse oximeter is utilized, the variable pitch tone and low threshold alarm shall be audible to the anesthesiologist or the anesthesia care team personnel.* Adequate illumination and exposure of the patient are necessary to assess color. *

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B. VENTILATION:

Objective

To ensure adequate ventilation of the patient during all anesthetics.

Methods

1. Every patient receiving general anesthesia shall have adequacy of ventilation continually evaluated. Qualitative clinical signs such as chest excursion, observation of the reservoir breathing bag and auscultation of breath sounds are useful. Continual monitoring of the presence of expired carbon dioxide shall be performed unless invalidated by the nature of the patient, procedure or equipment. Quantitative monitoring of the volume of expired gas is strongly encouraged.*
2. When an endotracheal tube, laryngeal mask is inserted, its correct positioning must be verified by clinical assessment and by identification of carbon dioxide in the expired gas. Continual end-tidal carbon dioxide analysis, in use from the time of endotracheal tube/laryngeal mask placement, until extubation/removal or initiating transfer to a postoperative location, shall be performed using a quantitative method such as capnography, capnometry or mass spectroscopy.* When capnography or capnometry is utilized, the end-tidal CO₂ alarm shall be audible to the anesthesiologist or the anesthesia care team personnel.*
3. When ventilation is controlled by a mechanical ventilator, there shall be in continuous use a device that is capable of detecting disconnection of components of the breathing system. The device must give an audible signal when its alarm threshold is exceeded.
4. During regional anesthesia (with no sedation) or local anesthesia (with no sedation), the adequacy of ventilation shall be evaluated by continual observation of qualitative clinical signs. During moderate or deep sedation the adequacy of ventilation shall be evaluated by continual observation of qualitative clinical signs and monitoring for the presence of exhaled carbon dioxide unless precluded or invalidated by the nature of the patient, procedure or equipment.

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C. CIRULATION:

Objective

To ensure the adequacy of patient's circulatory function during all anesthetics.

Methods

1. Every patient receiving anesthesia shall have the electrocardiogram continuously displayed from the beginning of anesthesia until preparing to leave the anesthetizing location.*
2. Every patient receiving anesthesia shall have arterial blood pressure and heart rate determined, evaluated and documented at least every 5 minutes.*

D. TEMPERATURE:

Objective

To aid in the maintenance of appropriate body temperature during all anesthetics.

Methods

1. Every patient receiving anesthesia shall have temperature monitored when clinically significant changes in body temperature are intended, anticipated or suspected.
2. This should be recorded every 15 minutes. Short cases lasting less than 15 minutes shall have their temperature taken and recorded at least once.

E. NEUROMUSCULAR FUNCTION

Objective

To aid in the recognition of residual skeletal muscle weakness in the postoperative period owing to the intraoperative administration of neuromuscular blocking (most often nondepolarizing) drugs.

Methods

Qualitative clinical signs such as visual and tactile observations and clinical signs such as head-lift, handgrip, and tidal volume may be helpful,

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but every patient receiving neuromuscular blocking drugs should have objective monitoring for the intensity of neuromuscular blockade during the intraoperative period and prior to tracheal extubation. Prior to tracheal extubation, pharmacologic antagonism of neuromuscular blockade should be considered based on subjective and objective monitoring to minimize the risk of residual drug-induced postoperative weakness.

Under extenuating circumstances, the responsible anesthesiologist may waive the requirements marked with an asterisk (); it is recommended that when this is done, it should be stated (including the reason) in a note in the patient's medical record.

ATTACHMENT:

Standards for Basic Anesthetic Monitoring, Approved by the ASA House of Delegates on October 21, 1986, and last amended on October 28, 2015

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