

ASA Standards for Capnography

EDITORIAL

THE LATEST ASA MANDATE: CO₂ MONITORING FOR MODERATE AND DEEP SEDATION

The 2010 House of Delegates of the American Society of Anesthesiologists (ASA) amended its Standards for Basic Anesthetic Monitoring to require mandatory monitoring of exhaled end-tidal carbon dioxide (EtCO₂) during moderate or deep sedation.

"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 ..."

Rather than evidence-based, this standard is based on data, this document initiated by the ASA Committee on Standards and Practice Parameters, approved by the ASA Board of Directors, and passed by the October 2010 ASA House of Delegates with supposedly little debate. This new standard makes perfect sense for medical anesthesiologists, particularly those who are not in the operating room. It costs them essentially nothing and provides valuable information about patient safety. ASA physicians provide moderate and deep sedation in rooms as they do in the operating room. All that is required is to either those with a CO₂ saturation monitor or to have a standard O₂ saturation monitor. Because modern, "high-quality" monitors rarely use a probe in the patient's mouth, rather than a probe in the patient's open mouth like the operating dentist does from his or her usual position, monitoring EtCO₂ for the anesthesiologist is far superior to the pulse oximeter for immediately

"... monitoring EtCO₂ for the anesthesiologist is far superior to the pulse oximeter for immediately detecting an obstructed airway, opiate-induced apnea, or other airway problems that only much later may be detected by the pulse oximeter."

detecting an obstructed airway, opiate-induced apnea, or other airway problems that only much later may be detected by the pulse oximeter. Monitoring EtCO₂ is particularly important when anesthesiologists provide moderate sedation for patients who are too medically compromised to safely undergo general anesthesia and who would almost never be sedated in a dental office, such as an ASA IV patient with severe chronic obstructive pulmonary disease who may retain high levels of CO₂ during sedation or a morbidly obese, insulin-dependent diabetic patient with severe obstructive sleep apnea. Additionally, when the anesthesiologist is also not the person giving the local anesthetic (as in breast biopsy) or in the case of a colonoscopy (during moderate sedation is not accompanied by the anesthesiologist's presence), the anesthesiologist's

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anesthesiologist can be brought into the procedure to relieve the discomfort associated with the endodontic procedure. This standard will complicate this far-reaching ASA requirement, as the Centers for Medicare and Medicaid Services (CMS) in 2009 and 2010 rewrote their CMS Hospital Conditions of Participation and Interpretive Guidelines that govern anesthesia services. The CMS mandates that all anesthesia services in a hospital be organized by a qualified physician and consistently implemented in every hospital department and area where "anesthesia services" are rendered. However, as opposed to the ASA standards, the CMS definition of "anesthesia services" excludes topical and local anesthesia, minimal sedation, moderate sedation/analgesia (conscious sedation), and labor epidural analgesia. Thus, even though the CMS does not require standardization of any monitoring, including EtCO₂, throughout the hospital for moderate sedation, because the ASA standards require anesthesiologists to monitor EtCO₂ for all of their moderate sedations, the

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Anesth Prog 58:111–112 2011

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