



New Guidance on Preventing Anesthesia Awareness

Since the publication of our article on Anesthesia Awareness in the September 2005 issue of the *PA-PSRS Patient Safety Advisory*, the American Society of Anesthesiologists (ASA) Task Force on Intraoperative Awareness released a Practice Advisory for Intraoperative Awareness and Brain Function Monitoring.

The Practice Advisory:

- Identifies risk factors associated with intraoperative awareness.
- Provides decision tools to assist the clinician in reducing intraoperative awareness.
- Encourages assessment of prevention/reduction strategies related to intraoperative awareness.
- Provides guidance concerning use of brain function monitors as they pertain to intraoperative awareness.

The ASA indicates that practice advisories are not founded on scientific literature to the same extent as standards or guidelines because there are too few controlled studies on a topic. Practice advisories provide a review of the literature and consensus based on opinions of task force members, expert consultants, public commentary, and open forums. Practice advisories are revised as indicated by changes in technology, medical practice, and knowledge.

The ASA advises the following interventions to reduce the risk and impact of intraoperative awareness:

Preoperative Evaluation

Identification of Risk Factors

- Patient Condition: Reviewing the medical record to identify risk factors in the patient's history:
 - Previous episode of intraoperative awareness
 - History of anticipated difficult intubation
 - Receiving high doses of opioids for chronic pain
 - Substance use/abuse
 - ASA status 5-4
 - Limited hemodynamic reserve
- Surgical Procedures: Determining potential risk of intraoperative awareness associated with the type of surgery:
 - Cardiac
 - Trauma
 - Emergency
 - Cesarean section
- Anesthesia Plan: Determining potential risk factors associated with planned anesthesia:
 - Nitrous oxide – opioid anesthesia
 - Use of muscle relaxants during maintenance phase of general anesthesia
 - Reduced doses of anesthesia in the presence of paralysis

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This article is reprinted from the *PA-PSRS Patient Safety Advisory*, Vol. 3, No. 1—March, 2006. The Advisory is a publication of the Pennsylvania Patient Safety Authority, produced by ECRI & ISMP under contract to the Authority as part of the Pennsylvania Patient Safety Reporting System (PA-PSRS).

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Interview/Discussion

- Interviewing patients preoperatively to:
 - Gather information about previous anesthesia experiences
 - Assess anxiety level
- For those determined to be at substantially increased risk of intraoperative awareness, the clinician informs the patient of the risk, if possible.

Preinduction Phase of Anesthesia

- Using a checklist protocol for anesthesia machines and equipment to ensure the delivery of proper doses of anesthetic agents.
- Verifying proper function of other equipment: intravenous access, infusion pumps, connections, appropriate back-flow check valves.
- On a case-by-case basis in selected patients, determining whether prophylactic benzodiazepine is appropriate (such as for patients requiring smaller doses of anesthetics).

Intraoperative Monitoring

Monitoring anesthesia depth with multiple approaches:

- Conventional monitoring systems: BP, HR, ECG, end-tidal anesthetic analyzer, capnography.
- Clinical observations: checking reflexes or purposeful movement. (But, neuromuscular blocking agents may mask such movement).
- Brain function monitoring: The practitioner decides to use such a monitor on a case-by-case basis for selected patients (such as those receiving light anesthesia). The ASA does not recommend routine use of such monitors for general anesthesia patients at this time.

Intraoperative and Postoperative Management

- On a case-by-case basis, deciding whether to administer intraoperatively a benzodiazepine after a patient unexpectedly becomes conscious.
- Speaking with patients who recall intraoperative events to discuss possible reasons for the occurrence and to obtain the patient's perspective of the details of the event.
- Using a structured interview or questionnaire to capture the details of what the patient experienced.
- Completing a report about the event for quality management purposes.
- Offering counseling/psychological support to those reporting intraoperative awareness.

Source

Excerpted from Practice Advisory for Intraoperative Awareness and Brain Function Monitoring, Copyright 2005, of the American Society of Anesthesiologists. A copy of the full text can be obtained from ASA, 520 N. Northwest Highway, Park Ridge, Illinois 60068-2573.



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