Statement on the Use of Sedation and Analgesia in the Gastrointestinal Endoscopy Setting

Definitions

For the purpose of this document, Society of Gastroenterology Nurses and Associates, Inc. (SGNA) has adopted the following definitions:

Nurse refers to the registered nurse, licensed practical nurse, or licensed vocational nurse.

Patient Care in the Gastrointestinal Endoscopy Unit refers to the preprocedure, intraprocedure, and postprocedure care of the patient undergoing gastrointestinal endoscopy regardless of the setting.

Sedation and Analgesia refer to a continuum of states ranging from minimal sedation (anxiolysis) through general anesthesia (American Society of Anesthesiologists [ASA], 2001).

Minimal Sedation (Anxiolysis) refers to a drug-induced state during which patients respond normally to verbal commands. Although cognitive function and coordination may be impaired, ventilatory and cardiovascular functions are usually maintained (ASA, 2001).

Moderate Sedation/Analgesia refers to a drug-induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained (ASA, 2001).

Deep Sedation/Analgesia refers to a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained (ASA, 2001).

General Anesthesia refers to a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of the neuromuscular function. Cardiovascular function may be impaired (ASA, 2001).

*Reflex withdrawal from a painful stimulus is not considered a purposeful response (ASA, 2001).
Background

The role of the registered nurse in the use of sedation and analgesia is expanding. Moderate sedation is standard for gastrointestinal endoscopy (Heuss, Schnieper, Drewe, Pfimlin, & Beglinger, 2003). Multiple studies now exist supporting the use of deep sedation for select groups of patients undergoing diagnostic or therapeutic procedures in the field of gastroenterology (Heuss et al., 2003; Rex et al., 2002; Sipe et al., 2002; Walker et al., 2003). Currently, there is a growing body of evidence supporting the safe use of nurse-administered deep sedation under the direct supervision of the physician (Heuss et al., 2003; Rex et al., 2002; Sipe et al., 2002; Walker et al., 2003; Weston et al., 2003).

Most endoscopic procedures are performed under moderate sedation and analgesia. The purpose of sedation and analgesia is to relieve anxiety, discomfort, or pain and diminish memory for the event (American Society for Gastrointestinal Endoscopy [ASGE], 2000; American Society for Gastrointestinal Endoscopy Standards of Practice Committee, 2002). The level of sedation should be titrated to achieve a safe, comfortable, and technically successful procedure.

The ASA (2001), the American Society for Gastrointestinal Endoscopy Standards of Practice Committee (2003), and the SGNA (2003) have all published practice guidelines covering this topic.

Position

Moderate Sedation

The SGNA supports the position that registered nurses trained and experienced in gastroenterology nursing and endoscopy can administer and maintain moderate sedation and analgesia by the order of a physician (ASGE/SGNA, 2004). In addition, the gastroenterology registered nurse can be given responsibility for the administration of reversal agents prescribed by the physician. The gastroenterology registered nurse has education and experience in endoscopy, knowledge of medications used, and the skills to assess, diagnose, and intervene in the event of complications (ASGE/SGNA, 2004).

The registered nurse is responsible for monitoring and assessing the patient receiving moderate sedation and analgesia throughout diagnostic and therapeutic endoscopic procedures (SGNA, 2005). Automatic monitoring devices may enhance the ability of the registered nurse to accurately assess the patient, but are no substitute for the watchful, educated assessment by the registered nurse.

During moderate sedation, the registered nurse monitoring the patient may assist with minor, interruptible tasks once the patient’s level of sedation/analgesia and vital signs have stabilized (ASGE/SGNA, 2004). Adequate monitoring of the patient’s level of sedation must be maintained (ASA, 2001; American Society for Gastrointestinal Endoscopy Standards of Practice Committee, 2002).

Because of the importance assigned to managing the patient who is receiving sedation and analgesia, a second nurse or associate is required to assist the physician with those procedures that are complicated by the severity of the patient’s illness and/or the complex technical requirements associated with advanced diagnostic and therapeutic procedures (American Society for Gastrointestinal Endoscopy Standards of Practice Committee, 2003; SGNA, 2005).

Deep Sedation

The SGNA recommends that registered nurses and physicians involved in the administration of deep sedation have additional training with emphasis on advanced airway management and treatment of cardiorespiratory complications (ASGE/SGNA, 2004). This may include, but is not limited to, advanced cardiac life support, pediatric advanced life support, additional advanced airway management training, and advanced training on medications that can be used to achieve deep sedation or can lead to or easily induce a state of general anesthesia. The regulations governing administration of these medications by registered nurses vary from state to state. Registered nurses and physicians must be aware of the limitations of state licensure, state nurse practice act, and current individual institutional policies.

The SGNA recommends that the registered nurse be present to monitor the patient throughout procedures performed with deep sedation/analgesia. Automatic monitoring devices may enhance the ability of the registered nurse to accurately assess the patient, but are no substitute for the watchful, educated assessment by the registered nurse.

During deep sedation, the registered nurse should have no other responsibilities (ASA, 2001). Because of the importance assigned to managing the patient who is receiving sedation and analgesia, a second nurse or assistant is required to assist the physician (SGNA, 2005).

The SGNA supports the position of the ASGE that the assistance of anesthesiologists should be considered in patients undergoing prolonged procedures, requiring deep sedation (ASGE/SGNA, 2004).

Additional Considerations

Some patient populations such as pediatrics (American Academy of Pediatrics/American Academy of Pediatric Dentistry, 2006; Krauss & Green, 2006), pregnant and lactating women (ASGE, 2005), and patients with sleep apnea (ASA, 2005) or previous problems with anesthesia or sedation, as well as comorbidities and anatomic variants, may need special consideration related to their sedation plan (American Society for Gastrointestinal Endoscopy Standards of Practice Committee, 2002).

References


**Suggested Reading**


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