Analgesia and Moderate Sedation

This Nebraska Board of Nursing advisory opinion is issued in accordance with Nebraska Revised Statute (NRS) 71-1,132.11(2). As such, this advisory opinion is for informational purposes only and is non-binding.

Analgesia/ Moderate Sedation

Moderate Sedation

Definitions

Minimal Sedation is 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 unaffected.

Moderate Sedation/Analgesia (formerly referred to as “Conscious Sedation”) is 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.

Deep Sedation/Analgesia is 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.

General Anesthesia is 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 neuromuscular function. Cardiovascular function may be impaired.

*Reflex withdrawal from a painful stimulus is NOT considered a purposeful response.

Management and Monitoring

It is within the scope of practice of a registered nurse who is not a qualified anesthesia provider to manage and monitor the care of patients receiving IV moderate sedation during therapeutic, diagnostic, or surgical procedures provided the following criteria are met:

1. Administration of IV moderate sedation medications by non-anesthetist RNs is allowed by institutional policy, procedures, and protocol. Written protocols
which address specific drugs to be used for moderate sedation, the purpose, goals, techniques, desired outcomes of administration, and the recommended dose per kilogram of body weight that may be safely administered by an RN, taking into account the patient’s age and co-morbidities.

2. A qualified anesthesia provider or licensed practitioner orders the medications to achieve IV moderate sedation.

3. Guidelines for patient monitoring, drug administration, and protocols for dealing with potential complications or emergency situations are available and have been developed in accordance with accepted standards of anesthesia practice.

4. The registered nurse managing and monitoring the care of the patient receiving IV moderate sedation shall have no other responsibilities that would leave the patient unattended or compromise continuous patient monitoring.

Qualifications

1. The registered nurse managing the care of patients receiving IV moderate sedation is accountable to:
   a. Demonstrate the acquired knowledge of anatomy, physiology, pharmacology, cardiac arrhythmias and complications related to IV moderate sedation and medications.
   b. Understand the principles of oxygen delivery, respiratory physiology, oxygen transport and uptake, as well as demonstrate the ability to use oxygen delivery devices.
   c. Anticipate and recognize potential complications of IV moderate sedation in relation to the type of medication being administered.
   d. Possess the requisite knowledge and skills to assess, diagnose and intervene in the event of complications or undesired outcomes. The nurse must be able to institute nursing interventions in compliance with orders (including standing orders) or institutional protocols or guidelines.
   e. Demonstrate competency in airway management and resuscitation appropriate to the age of the patient. This maybe completed by ACLS/PALS certification or appropriate competency assessment.
   f. Demonstrate knowledge of the legal ramifications of administering IV moderate sedation and/or monitoring patients receiving IV moderate sedation, including the RN's responsibility and liability in the event of an untoward reaction or life-threatening complication.

Additional Guidelines

1. The institution or practice setting has in place an educational/competency validation mechanism that includes a process for evaluating and documenting the individuals' demonstration of the knowledge, skills, and abilities related to the management of patients receiving IV moderate sedation. Evaluation and documentation of competence occurs on a periodic basis according to institutional policy.
2. Intravenous access will be continuously maintained for the patient receiving IV moderate sedation and analgesia.

3. All patients receiving IV moderate sedation will be continuously monitored throughout the procedure as well as the recovery phase by physiologic measurements including, but not limited to, respiratory rate, oxygen saturation, blood pressure, cardiac rate and rhythm, and patient's level of consciousness.

4. Supplemental oxygen will be immediately available to all patients receiving IV moderate sedation and administered per order (including standing orders).

5. An emergency cart with a defibrillator must be immediately accessible to every location where IV moderate sedation is administered. Suction and a positive pressure breathing device, oxygen, and appropriate airways must be in each room where IV moderate sedation is administered.

6. Provisions must be in place for back-up personnel who are experts in airway management, emergency intubation, and advanced cardiopulmonary resuscitation if complications arise during IV moderate sedation.

7. It is not considered appropriate for an RN to administer Propofol, Etomidate, Pentothal and Ketamine for the use of IV moderate sedation. An exception is the administration of Propofol by an RN to an intubated, ventilated patient in the critical care setting.

**Analgesia**

It is the opinion of the Nebraska Board of Nursing that it is within the scope of practice for a registered nurse to manage the care of non-pregnant patients receiving analgesic medication via epidural catheter for acute or chronic pain.

**Management and Monitoring**

The RN will assume responsibility for patient care only after the anesthesia provider has placed the catheter, verified placement of the epidural catheter, administered an initial test dose of pain medication with the patient’s vital signs remaining stable.

The RN may:

1. Monitor the patient's vital signs, mobility, level of consciousness, and perception of pain.
2. Replace empty infusion syringes or infusion bags with new, pre-prepared solutions according to authorized provider’s orders.
3. Reinject medication following establishment of appropriate therapeutic range and adjustment of drug infusion rate in compliance with the authorized provider’s patient-specific written orders.
4. Administer a bolus dose though the bolus features of a continuous infusion pump, following establishment of appropriate therapeutic range.

5. Remove the catheter, if educational criteria and institutional policy allow. Removal of the catheter by a RN is contingent upon receipt of a specific order from a qualified anesthesia provider or licensed practitioner.

6. Decrease or stop the continuous infusion if there is a safety concern

7. Initiate emergency therapeutic measures according to institutional policy and/or protocol if complications arise.

The following are not considered within the scope of practice for an RN:

1. The RN may not place the catheter, check placement or give an initial test dose.

2. The RN may not administer anesthetic medications via an epidural catheter for the purposes of anesthesia.

3. The RN may not bolus, rebolus, or increase the rate of an epidural catheter except as noted above.

**Qualifications**

1. Only registered nurses with the appropriate education, knowledge, skills and supervised clinical practice are allowed to administer and manage the medications for epidural analgesia.

2. Education: The registered nurse must receive instructions in and demonstrate competence in the following:
   a. Epidural anatomy and physiology.
   b. Indications and contraindications to epidural analgesia.
   c. Potential adverse reactions.
   d. Maintenance of the catheter and or infusion device and related equipment.
   e. Pharmacology and pharmacokinetics of commonly used analgesia medications.
   f. Nursing care responsibilities as defined and approved by institutional policy.

**Additional guidelines**

1. Written policy and procedures are maintained by the employer/agency. Guidelines for the patient monitoring, drug administration, management, and protocols for dealing with potential complications or emergency situations are available and have been developed in conjunction with the physician or CRNA.

A licensed nurse is accountable to be competent for all nursing care that he/she provides. Competence means the ability of the nurse to apply interpersonal, technical and decision-making skills at the level of knowledge consistent with the prevailing standard for the nursing activity being applied. Accountability also includes
acknowledgment of personal limitations in knowledge and skills, and communicating the need for specialized instruction prior to providing any nursing activity.

References

American Association of Critical-Care Nurses. Role of the Registered Nurse (RN) in the Management of Patients Receiving Conscious Sedation for Short-Term Therapeutic, Diagnostic or Surgical Procedures. 1996.


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