

OKLAHOMA BOARD OF NURSING
2915 N. Classen Boulevard, Suite 524
Oklahoma City, OK 73106
(405) 962-1800

Guidelines for the Registered Nurse Monitoring Obstetrical Patients Receiving
Analgesia/Anesthesia by Catheter Techniques (Epidural, Intrathecal, Spinal, PECA Catheters)

I. Rationale

Registered Nurses who are not licensed anesthesia care providers should monitor, not manage, the care of pregnant patients receiving analgesia/anesthesia by catheter techniques. Whenever regional analgesia/anesthesia is administered, a qualified, credentialed, licensed anesthesia provider should be readily available as defined by institutional policy. Physiologic and anatomic changes of pregnancy increase the risk of regional analgesia/anesthesia complications. These guidelines address the RN monitoring the obstetrical patient receiving medications by catheter techniques for the protection of the health, safety and welfare of the pregnant woman and fetus. The Registered Nurse responsible for monitoring regional labor analgesia/anesthesia must be prepared to handle both patients' complications, some of which may be life-threatening.

II. Definitions

- A. Analgesia/Anesthesia by Catheter Techniques: Administration of medication for analgesia/anesthesia via the Epidural, Intrathecal, Spinal, or patient-controlled epidural analgesia (PCEA) Catheters;
- B. Analgesia: the absence of pain in response to stimulation that would normally be painful;¹
- C. Anesthesia: The loss of feeling or sensation. Although the term is used for loss of tactile sensibility or of any of the other senses, it is applied especially to loss of the sensation of pain, as it is induced to permit performance of surgery or other painful procedures;²
- D. Epidural space: Situated upon or outside the dura mater.²
- E. Subarachnoid space (Intrathecal space): Situated or occurring between the arachnoid and the pia mater.³
- F. Patient-Controlled Epidural Analgesia (PCEA): PCEA is the titrating delivery of analgesic agents into the epidural space to meet a patient's individual requirements while attempting to minimize medication-related side effects.

III. Responsibilities of the Registered Nurse Assuming Monitoring of the Care of Obstetrical Patients Receiving Analgesia/Anesthesia by Catheter Techniques:

- A. Following stabilization of vital signs after either initial insertion, initial injection, bolus injection, rebolus injections, or initiation of continuous infusion by a licensed, credentialed anesthesia care provider, non-anesthetist Registered Nurses in communication with the obstetric and anesthesia care providers may:

1. Monitor the patient's vital signs, mobility, level of consciousness, and perception of pain;
 2. Monitor the status of the fetus
 3. Replace empty infusion syringes or infusion bags with new, pre-prepared solutions containing the same medication and concentration, according to orders provided by the anesthesia care provider;
 4. Stop the continuous infusion if there is a safety concern or the woman has given birth;
 5. Remove the catheter upon receipt of a specific order from a qualified anesthesia or physician provider, when educational criteria have been met and institutional policy allows;
 6. Initiate emergency therapeutic measure according to institutional policy and/or protocol if complications arise;
 7. The non-anesthetist Registered Nurse should communicate any nursing assessments or changes in patient status to the obstetric and anesthesia care providers as indicated by institutional policy.
- B. The non-anesthetist Registered Nurse may not:
1. Rebolus an epidural either by injecting medication into the catheter or increasing the rate of continuous infusion;
 2. Increase/decrease the rate of a continuous infusion;
 3. Re-initiate an infusion once it has been stopped;
 4. Manipulate PCEA doses or dosage intervals;
 5. Be responsible for obtaining informed consent for analgesia/anesthesia procedures (however, the Registered Nurse may witness the patient signature for informed consent prior to analgesia/anesthesia administration.)

IV. Education/ Training

- A. The registered nurse providing care for the woman during labor must have documented education with documented competency and ensure her/his practice is guided by agency policies and procedures. The education must include, but is not limited to:
1. Anatomy and physiology, of the spinal cord and column, location of catheter placement;
 2. Pharmacology and complications related to the analgesia/anesthesia technique and medication;
 3. Assessment of the patient's total care needs during analgesia/anesthesia;
 4. Utilization of monitoring modalities, interpretation of physiological responses and initiation of nursing interventions to ensure optimal patient care;
 5. Anticipation and recognition of potential complications of the analgesia/anesthesia in relationship to the type of catheter/infusion device and medication being utilized.
 6. Recognition of emergency situations and implementation of nursing interventions in compliance with the anesthesia provider's or attending physician's guidelines and orders.

7. The cognitive and psychomotor skills necessary for use of mechanical infusion devices;
8. Knowledge and skills required for catheter removal.

V. Policies and Procedures

The following policies and procedures developed in conjunction with the anesthesia/analgesia provider must be available in writing within the employing facility and must be available to the Registered Nurse monitoring the obstetrical patient receiving analgesia/anesthesia by catheter technique:

- A. Patient Monitoring;
- B. Protocols for handling potential complications and emergency situations;
- C. Patient-Controlled analgesia;
- D. Infusion Pump functions;
- E. Catheter maintenance and removal.

VI. References:

1. Cousins, Michael and Bridenbaugh, Phillip. (1988) Neural Blockade in Clinical Anesthesia and Management of Pain, 2nd ed. (Philadelphia: JB Lippincott Co.)
2. Dorland's Illustrated Medical Dictionary, 26th ed. (Philadelphia: WB Saunders Co.)
3. Assad, Sam; Isaacson, Sheldon; Wu, Christopher. (2003) An Update on Patient-Controlled Epidural Analgesia, *Techniques in Regional Anesthesia and Pain Management*, 7, 127-132.

VII. Acknowledgement:

4. These guidelines are largely derived from the document: Association of Women's Health, Obstetric and Neonatal Nursing Clinical Position Statement: The Role of the Registered Nurse (RN) in the Care of Pregnant Women Receiving Analgesia/Anesthesia by Catheter Techniques (Epidural, Intrathecal, Spinal, PCEA Catheters). Approved 2001.