

Care of Patients Receiving Analgesia by Catheter Techniques

Position Statement and Policy Considerations

Position Statement

Registered nurses (RNs) are valuable members of the patient care team who are the front line managers of each patient's unique wellness and comfort needs. As continuous direct patient care givers, RNs have the opportunity to support patients to make knowledgeable decisions regarding the management of pain. RNs are qualified through education, credentialing, and ongoing competency assessment to manage, monitor, and care for laboring and non-laboring patients receiving analgesia through various catheter techniques for pain relief, according to written protocol or orders.¹

RNs practice in accordance with their professional scope of practice, federal and state law, and facility policies and procedures to manage, monitor, and care for patients with continuous pain management catheters. Facilities support RN lifelong learning and practice excellence through ongoing education, training, competency assessment, and continuous quality improvement activities performed by their clinicians. The availability of anesthesia services may vary across geographic locations, particularly in critical access or rural locations. RNs, in collaboration with the anesthesia professional, offer well managed and effective continuous patient analgesia.

This document focuses on acute pain care for patients receiving analgesia through various catheter techniques. It does not cover implantable devices for chronic pain management.

Introduction

Patient-centered acute pain management is optimized when there is shared decision making between the patient and interdisciplinary team to understand, address, monitor, and manage the patient's pain. Technological advances have resulted in the ability to deliver analgesics and local anesthetics via a variety of catheter techniques, including epidural infusion pumps. Additionally, continuous peripheral nerve catheters offer ongoing pain relief to patients in the postoperative and post discharge period for surgical patients.²

RN Role in the Management of Patients Receiving Analgesia by Continuous Catheters

The clinical roles and responsibilities of RNs in the management of patients receiving analgesia by continuous catheter are delineated by their respective professional organizations:

- The American Society for Pain Management Nursing has published the position statement titled *Registered Nurse Management and Monitoring of Analgesia by Catheter Techniques*, which addresses the RNs roles and responsibilities in the management of non-laboring patients of all ages receiving analgesia by catheter techniques across all care settings.¹
- The Association of Women's Health, Obstetric and Neonatal Nurses has published the position statement titled *Role of the Registered Nurse in the Care of the Pregnant Woman Receiving Analgesia and Anesthesia by Catheter Techniques*, which addresses the RNs roles and responsibilities in the management of laboring patients receiving analgesia by catheter techniques.³

Policy Considerations

Effective facility policies and procedures are best developed, customized, and reviewed by members of the interdisciplinary team. These policy considerations are intended to offer a resource to facilities and the pain management or obstetric teams. In development of policies, consult with the state Board of Nursing and other relevant laws and regulations.

Facility

- Develop and maintain policies, procedures, and guidelines available for all clinicians involved in the placement, monitoring, and management of patients receiving analgesia by catheter technique.
- The facility provides adequate preparation and support to clinicians, including education, competency development, and assessment.
- Develop and monitor outcome measures for continuous quality improvement activities.

Anesthesia Professional^{1,2,4-9}

- Develop a plan of care through review of patient health and medication history, including anticoagulants, assessment and evaluation of current pain state, the patient's understanding of their pain, and establishment of goals for pain management.⁴⁻⁶
- Obtain patient informed consent for the procedure.^{5,9}
- Place and dose the regional or neuraxial catheter to verify correct catheter placement.^{2,7}
- Administer a test dose for epidural catheter placement.⁷
- Assess the patient's vital signs after catheter placement.
- Write or enter orders¹
 - Appropriate medication(s), dosages, and concentrations to be infused
 - Manage side effects and complications
 - Monitoring parameters and frequency
 - Contact information (e.g., pager, phone number)
- Communicate with the RN regarding patient status or changes in patient status during treatment.¹
- Assess the patient's pain
 - Labor analgesia – as clinically indicated
 - Acute pain – daily and as clinically indicated
- The anesthesia professional, or another qualified provider, is available, as defined by facility policy, for consult and/or to manage complications.

Registered Nurse

- Education and competency^{1,3}
 - Identify and assess patient expectations and understanding of their existing and anticipated pain.
 - Participate in the development of the multimodal pain management plan.
 - Demonstrate knowledge of anatomy, physiology, pharmacology, and the potential complications related to the analgesic technique and medication(s) being administered.

- Assess the patient's emotional and physiologic responses to request modification of the plan of care.
- Demonstrate knowledge of appropriate infection prevention and control procedures related to catheter insertion, maintenance, and removal.¹⁰
- When local anesthetics are infused through an epidural catheter, assess sensory block and motor function, vital signs, level of consciousness, and perception of pain.
- Demonstrate the knowledge and skills necessary for catheter removal.
- Anticipate and recognize potential complications of the analgesia in relationship to the type of catheter/infusion device and medication(s) being administered and institute appropriate interventions in compliance with protocols, guidelines or orders.
- Have access to guidelines for patient monitoring, drug administration and protocols for dealing with potential complications or emergency situations.
- Assist in the placement of the continuous catheter
 - Organize supplies and care location for block placement
 - Review chart
 - Assess and educate the patient
 - Apply monitors
 - Assist in patient positioning
 - Document placement of block catheter
- Maintenance, monitoring, and care of patients receiving analgesia through a continuous catheter device are guided by written protocol or orders. RNs may be responsible for aspects of care including, but not limited to:^{1,3}
 - Providing patient and caregiver education.
 - Starting, adjusting, and discontinuing a catheter infusion.
 - Administering analgesic boluses (for non-laboring patients).
 - Troubleshooting infusion devices.
 - Replacing drug infusion with new, pre-packaged solution with the same medication and concentration as ordered.
 - Changing batteries, tubing, or dressing.
 - Assessing the catheter insertion site and integrity of the administration system.
 - Assessing analgesic efficacy and managing or treating analgesic-related side effects.
 - Initiating emergency protocols, including stopping the infusion, if complications arise.
 - Removing the catheter.
- An RN will assume care of the patient after the verification of correct catheter placement, administration of the test dose, and assessment of the patient's vital signs.
- Participates in reporting and review of outcome measures to optimize the pain management program and outcomes.

Table 1. Summary of the RN Role^{1,3,11,12}

RN Role	Acute Pain	Labor
Initial injection	No	No
Initiate infusion	Yes	No
Adjust infusion	Yes	Yes
Bolus injection	Yes	No
Replace infusion	Yes	Yes
Stop / Discontinue infusion	Yes	Yes
Remove catheter	Yes	Yes
Emergency management	Yes	Yes

Additional Considerations

- *Epidural*
It is recommended that continuous epidural catheters are only repositioned by an anesthesia professional.⁷ When an infusion pump is used, the anesthesia professional programs and initiates the infusion, attaching the epidural catheter using sterile technique, and programs the epidural pump with a patient-specific infusion plan including basal rate. For a PCEA, include the bolus dose and lockout period.
- *Intrathecal*
Intrathecal catheter will only be managed and dosed by an anesthesia professional.

Documentation

Care providers, including anesthesia professionals and RNs, document pertinent information in the patient's medical record in an accurate, complete, legible, and timely manner in accordance with facility policies and procedures.⁴

Conclusion

Patient-centered acute pain management involves the coordination of care across the entire interdisciplinary team to effectively address, monitor, and manage the patient's pain and discomfort. RNs are an integral member of the pain management team, who facilitate patient care, provide patient and caregiver education, and serve as the coordinator of all team members to provide the patient an optimal healthcare experience.

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Adopted by Council on Nurse Anesthesia Practice September 1985.

Revised by Council on Nurse Anesthesia Practice June 1988.

Adopted by AANA Board of Directors June 1989.

Revised by AANA Board of Directors June 1990 and June 1995.

Reaffirmed by AANA Board of Directors June 2003.

Revised as *Position Statement Number 2.8 Provision of Pain Relief by Medication Administered via Continuous Catheter or other Pain Relief Devices* by AANA Board of Directors August 2011.

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