Clinical Practice: Frequently Asked Question

Q: What is ASPAN's recommendation regarding the role of the perianesthesia nurse during a preoperative peripheral nerve block?

A: The perianesthesia registered nurse may assist with the placement of the peripheral nerve block, but only credentialed practitioners, usually anesthesiologists, prescribe and insert these devices. State nurse practice acts (NPA), state board of nursing and/or professional regulatory requirements may differ in how the RN's scope of practice is defined regarding participation during insertion. Before developing facility policies, procedures and competencies, review the applicable nurse practice act and board of nursing regulations for your state.[1,2]

In many facilities, nurses do assist during insertion of peripheral nerve blocks. Minimally, the RN should facilitate patient safety. Safety factors include completing a preprocedure checklist, and also verifying informed consent, IV access and patency, procedural timeout, and emergency equipment availability.[1]

When assisting with the procedure, a 1:1 nurse/patient ratio applies. Duties may include gathering supplies such as ultrasound equipment, administering physician-ordered moderate sedation, monitoring the patient, and in some cases, adjusting the stimulator's amplitude at the direction of the anesthesiologist.[2] Frequency of vital signs ranges from every two to 15 minutes, depending on the patient's response and overall condition.[2] Recognition of adverse reactions and timely intervention is critical.[1,3] Nurses assisting with blocks should maintain current ACLS/PALS credentials.

Depending upon state nurse practice act, board of nursing regulations, and facility policy, a nurse may inject local anesthetic through the peripheral nerve catheter under the direct supervision and instruction of the anesthesiologist.[2] The anesthesiologist should maintain the position of the needle and the catheter while the nurse injects the medication. The nurse effectively serves as the anesthesiologist's extra pair of hands.[1]

Nursing documentation reflects the nurse's participation in the procedure. Note the patient's condition on arrival and departure from the procedure area. Complete the preprocedure checklist and timeout. Chart vital signs with oxygen saturation. Document the cardiac rhythm, and where possible, include rhythm strips. Record medications administered and the response of the patient. Note adverse reactions. Document neurovascular and neurological checks. Include the patient's position, noting protective devices used as well as padding. The anesthesiologist should complete a physician procedure note. Continuous close monitoring by the perianesthesia registered nurse assisting during the placement of the peripheral nerve block is integral to a successful outcome.[4]

Nursing competencies should include ACLS/PALS, moderate sedation, Intralipid protocol, recognition of signs and symptoms of toxicity including cardiac arrhythmias and seizures, pharmacology of local anesthetic agents, and neurovascular/neurological checks. Nurses should be familiar with each type of block performed, its therapeutic effects, associated side effects, possible adverse reactions associated with the specific block performed and any indicated emergency interventions.[2] These competencies are necessary to ensure the patient's optimal safety during the peripheral nerve block procedure.

References:

1. Clifford T. Peripheral Nerve Blocks. *J Perianesth Nurs.* 2011;26(2):120-121.
2. McCamant K. Peripheral Nerve Blocks: Understanding the Nurse's Role. *J Perianesth Nurs.* 2006;21(1):16-26.
3. Sandlin-Leming D. Resuscitation of Local Anesthesia-Induced Cardiac Arrest: Lipids to the Rescue. *J Perianesth Nurs.* 2010;25(6):418-420.

4. Clark M. Lipid Emulsion as Rescue for Local Anesthetic-Related Cardiotoxicity. *J Perianesth Nurs.* 2008; 23(2):111-121.

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