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An advisory opinion adopted by AZBN is an interpretation of what the law requires. While an advisory opinion is not law, it is more than a recommendation. In other words, an advisory opinion is an official opinion of AZBN regarding the practice of nursing as it relates to the functions of nursing. Facility policies may restrict practice further in their setting and/or require additional expectations related to competency, validation, training, and supervision to assure the safety of their patient population and or decrease risk.

**OPINION: INFILTRATION OF LOCAL  
ANESTHETIC AGENTS: THE ROLE OF THE  
NURSE**

**APPROVED DATE: 3/2015**

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**ORIGINATING COMMITTEE:**

**SCOPE OF PRACTICE COMMITTEE**

Within the Scope of Practice of  RN  LPN

### **ADVISORY OPINION LOCAL ANESTHETIC AGENTS INFILTRATION: ROLE OF THE NURSE**

It is within the scope of practice of a registered nurse (RN) and a licensed practical nurse (LPN) to administer certain local anesthetic agents intradermal, subcutaneous, and submucosal for the purposes of analgesia and/or anesthesia prior to potentially painful procedures.

Tumescent lidocaine infiltration for ambulatory procedures, such as but not limited to, the treatment of hyperhidrosis, ambulatory phlebectomy and laser facial resurfacings would be within the RN scope under the direction of an licensed independent practitioner (LIP) and when certain criteria is met within this advisory opinion.

The licensed nurse must meet the general requirements and course of instruction listed in parts I and II.

#### **DEFINITIONS:**

1. Local anesthetic- the temporary suppression of sensation at a specific region of the body by pharmacological intervention. This type of anesthesia does not induce unconsciousness in the patient.
2. Short acting anesthetics- are defined as having a fast onset (one-to two minutes) and a relatively short (less than one to two hours) duration of action. Examples include but are not limited to: procaine (Novacaine®), lidocaine (Xylocaine®) without epinephrine, mepivacaine (Carbocaine®).
3. Long acting anesthetics- is defined as a medication with a slightly longer onset of action (two to five minutes) and a greatly prolonged duration (up to six hours). Examples include but are not limited to: bupivacaine (Marcaine®), etidocaine (Duranest®), lidocaine with epinephrine.
4. Topical pre-anesthetics- are medications such as ethyl chloride spray, EMLA cream, and anesthetic patches (Lidoderm®) these are used to provide numbing to a relatively short dermal depth, and usually with a very short duration (less than 15 minutes). These are not considered to be local anesthetics.

5. Tumescent anesthetic- the subcutaneous infiltration of diluted lidocaine, epinephrine and sodium bicarbonate in a diluent solution (e.g. 0.9% normal saline, lactated ringers) that causes targeted tissue to peel or become swollen, dimpled and firm resulting in a local anesthesia. Peak serum levels of lidocaine may not be reached until 10-12 hours after injection.

## **I. GENERAL REQUIREMENTS**

- A. There is a written order for the medication, dosage and route for the medication to be administered by an authorized provider, properly credentialed by the facility for the ordering of such medications. The licensed nurse may not independently select the medication or dosage to be administered during a procedure.
- B. A written policy and procedure is maintained by the employer which outlines the procedures and circumstances under which the local anesthetic may be administered including maximum weight-based, patient dependent dosages of medications (e.g. 35 mg/kg of lidocaine for tumescent anesthesia). Policies should also address an emergency response plan for adverse events.
- C. A nurse with appropriate education and demonstrated competency to ensure his/her practice is in compliance with the standards of safe nursing practice may administer local anesthetics.
  - a. For RNs performing tumescent anesthesia:
    - i. Documentation of satisfactory completion of the instructional program and supervised practice by a qualified provider is on file with the employer.
    - ii. The supervising provider is available in the building while procedure is performed and can respond to the RN within a medically reasonable timeframe.
- D. Documentation of knowledge, skill and competency should be readily available and on file with the agency/facility.

## **II. COURSE OF INSTRUCTION to include, but not limited to:**

- A. Age specific physiologic parameters that pertain to the patient's anatomy and physiology.
- B. Indications/contraindications/complication management related to the infiltration of local anesthetic agents.
- C. Calculation of and knowledge of the maximum safe dosage of facility approved medications and preparation.
- D. Pharmacology including drug actions, interactions, side effects, contraindications and untoward effects.
- E. Nursing care responsibilities related to a patient receiving a local anesthetic agent.

## **III. RATIONALE**

While it is generally not covered in a standard nursing program, local anesthetic infiltration is becoming the standard practice in many procedures for the purpose of analgesia/pain control and with additional training and competency assessment, is within the nurse's scope of practice. The practice of infiltrating local anesthetics by RNs and LPNs is inherent in many current advisory opinions (e.g. intravenous [IV] insertions, lumbar punctures, central line insertions, punch and shave biopsies, and peripheral inserted central catheter [PICC] insertion). With the appropriate knowledge and skills obtained from a licensed independent practitioner, licensed nurses are able to safely administer local anesthesia, smaller volumes given in a dilute form have

fewer life threatening risks and can be safely administered by the RN if the general requirements are met.

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