

ADED244C : Pain Management for the Dental Hygienist I

This course is designed to prepare student dental hygienists for the safe and effective administration of local anesthesia nerve blocks and infiltrations. The course includes classroom, laboratory, and clinical instruction. Course topics include the psychology of pain management, patient assessment and treatment planning, anesthesia techniques, complications, pharmacology of anesthetic agents, emergency precautions and management, ethical considerations, and a review of anatomy and physiology in relation to the administration of anesthetic agents. Upon successful completion of this course, and graduation, participants will have completed the educational requirements for a local anesthesia permit for the state New Hampshire.

Credits 2

Lab/Practicum/Clinical Hours 3

Lecture Hours 1

Prerequisites

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED103C

ADED114C

Corequisite Courses

ADED212C

ADED240C

ADED242C

ADED247C

ADED248C

Learning Outcomes

Student Learning Outcomes

1. Describe the fundamentals of nerve impulse generation and transmission, and the effects of local anesthesia upon impulse conduction.
2. Discuss the concepts and methods to help in the management of pain, anxiety, and fear in a variety of dental settings.
3. Describe and discuss the importance of the anatomical landmarks, bones, muscles, blood vessels and nerves associated with each type and location of local anesthetic injection.
4. Differentiate and discuss the clinical application between topical anesthesia, infiltrations, field block, and nerve block.
5. Describe and discuss the clinical applications of pharmacology with the commonly used dental anesthetics including chemical structure, classification, potency, toxicity, mechanisms of action and metabolism of each.
6. Describe and discuss the clinical indications and contraindications of local anesthetic use during patient care.
7. Conduct a patient assessment identifying conditions that influence the selection of a local anesthetic drug, the use of local anesthetics and vasoconstrictors.
8. Identify and describe potential drug interactions and adverse effects with the use of local anesthetics, vasoconstrictor, preservative or other components of the anesthetic solution.
9. Evaluate the patient medical history and physical status to determine the armamentarium, treatment modifications and potential for emergency situations in the administration of local anesthesia.
10. Recognize and manage local and systemic complications due to the injection or local anesthetic solutions, including the causes, symptoms, treatment and prevention.
11. Describe the procedure technique for each type of injection, including correct site for needle penetration and solution deposition, as well as the rationale for the selection of the appropriate local anesthetic.
12. Describe and demonstrate effective communication in proper patient management and techniques for the administration each injection taught within this course.
13. Demonstrate proper handling and infection control technique of the aspirating syringe during and after treatment, including needle recapping, syringe disassembly and cartridge and needle disposal.
14. Discuss ethical and legal considerations when administering local anesthesia in the clinical practice of dental hygiene.