

## Local Anesthesia: What are the Facts?

### What is local anesthesia?

It is the numbing of gums and teeth in a specific area of the mouth where scaling and root planing are necessary to treat periodontal (gum) disease. These scaling and root planing procedures may cause discomfort or pain if the tissues are not anesthetized.

**Claim:** *Dental hygienists do not have the education to administer local anesthesia.*

**Fact:** Dental hygienists have a minimum of three years of college education. This is comparable to the education of nurses who are RN's. Dental hygienists' education includes embryology, gross anatomy, head, neck and dental anatomy, dental radiology, medical emergencies, periodontal disease process and treatment, oral pathology, immunology, dental and medical pharmacology, and pain control. The curriculum also emphasizes community dental health, legal and ethical issues in dental hygiene practice, current technologies, and clinical practice standards.

**Claim:** *Current law limits those who are authorized to anesthetize dental patients to dentists, physician anesthesiologists, and certified nurse anesthetists. Dentists may currently utilize these anesthesiologists and nurse anesthetists if needed for administering a local anesthetic.*

**Fact:** To imply that dentists hire anesthesiologists and nurse practitioners to administer local anesthesia for scaling and root planing procedures in dental offices is misleading and erroneous. It is also misleading to imply that the depth of study and preparation of an anesthesiologist or a nurse anesthetist is necessary for administering local anesthesia for dental patients.

**Claim:** *Allowing licensed dental hygienists to administer local anesthesia lowers the standard of care in Texas.*

**Fact:** There is no evidence that this statement is true. There is evidence that in 46 other states, the District of Columbia and the U.S. Military it is considered the standard of care for hygienists to anesthetize their patients when the treatment calls for it.

**Claim:** *Most dental hygienists graduate from a 2-year program at a community or junior college.*

**Fact:** This is partially true. The Registered Dental Hygienist (RDH) designation is equivalent to the Registered Nurse (RN) designation in nursing. And, as in nursing, many hygienists have associate, bachelor and master's degrees. What is important, however, is that dental hygienists who administer local anesthesia are required to have the same proficiency in performing this procedure as a dentist. They must take the same course and demonstrate equal proficiency during supervised clinical experiences.

**Claim:** *Only dentists have the proper education and training to administer local anesthesia. There are no shortcuts to be properly trained and educated to inject patients with local anesthetic.*

**Fact:** It is true that there are no shortcuts to being properly trained and educated to inject patients with local anesthetic. There is no evidence that only dentists have the proper education and training to do it. Forty-six other states, Washington, D.C., and the U.S. Military have shown that hygienists can safely administer local anesthesia and have been doing so in some states since 1971.<sup>1</sup> This 50-year record of safety, where no hygienist has ever been cited for board disciplinary action, is evidence that hygienists are properly trained and administer local anesthesia safely in those states that allow it.

**Claim:** *Allowing hygienists to administer local anesthesia would be financially beneficial to hygienists.*

**Fact:** This statement is totally false. Dental hygienists who are educated and certified to administer local anesthesia are paid no more than hygienists without the certification.

**Claim:** *Continuing advancements in topical anesthetics limit the need to administer local anesthesia.*

**Fact:** There is no evidence-based support for this statement. It is well accepted that injectable anesthesia is the first choice for pain control for deep scaling and root planing procedures.<sup>2 3</sup> Studies show that only injectable local anesthetics can provide adequate comfort for deep soft tissues and root surfaces.<sup>4</sup> Using topical anesthetic in deep pockets is a disservice to patients. Patients pay for and expect definitive, painless treatment of periodontal disease. Topical anesthesia is not profound enough for patient comfort and the duration is less than 20 minutes, which is not enough time for adequate periodontal therapy.<sup>5</sup>

---

<sup>1</sup> Boynes SG, Bassett K. Utilization standards for local anesthesia delivery by no dentists. Pain Management. Nov 8, 2016

<sup>2</sup> Van Steenberghe D, Garmyn P, Geers L, Hendrickx E, Marechal M, Huizar K, et al..Patients' experience of pain and discomfort during instrumentation in the diagnosis and non-surgical treatment of periodontitis. J Periodontol 2004;75:1465-1470.

<sup>3</sup> Canakci CF, Canakci V. Pain experienced by patients undergoing different periodontal therapies. J Am Dent Assoc 2007;138:1563-1573.

<sup>4</sup> Antoniazzi RP, Cargnelutti B, et al. Topical intrapocket anesthesia during scaling and root planing: a randomized clinical trial. Braz Dent J. 2015;26(1):26-32.

<sup>5</sup> Friskopp J, Huledal G. Plasma levels of lidocaine and prilocaine after application of Oraqix, a new intrapocket anesthetic, in patients with advanced periodontitis. J Clin Periodontol 2001;28:425-429.