

## Troubleshooting Local Anesthetics

Dr. Derek Decloux

Dental Anesthesia Specialist from Hamilton, ON

Greg Allan

3<sup>rd</sup> Year Dental Student, UBC

### TIPS ON ADMINISTERING SUCCESSFUL MANDIBULAR BLOCKS

#### EXPERIENCE

- Lack of experience is one of the main causes of increased failure rate in the administering of mandibular blocks.
- Statistically, it is not unusual for a 3<sup>rd</sup> year dental student to miss 2 out of 5 blocks. After dental school that number falls to 1 in 5. After 10 years of practice, the number is 1 in 10. After 20 years, it is 1 in 20.
- The more blocks you do, the more you will learn some of the intricacies of individual cases and develop techniques to deal with them.

#### TAKE YOUR TIME

- Studies show that if you inject a full cartridge of anesthetic over the course of 2 minutes, as opposed to 30 seconds, there is an increased chance of success in achieving pulpal anesthesia.
- The degree of nociception dissipated isn't necessarily correlated to the amount of soft tissue anesthesia. Pulpal anesthesia is often not achieved for a couple of minutes after soft tissue anesthesia. Recommend waiting up to 5 minutes after soft tissue anesthesia before proceeding.

Note: sometimes a patient will have profound soft tissue anesthesia and they will still experience discomfort after waiting 10 mins. This can be due to accessory innervation. Dentists can develop techniques over time to deal with this.

#### KNOWLEDGE

- When depositing a cartridge of local anesthetic, make sure you can describe all intraoral and extraoral landmarks in 3 dimensions.
- Know which tissues are anesthetized, which specific complications could arise and if there are any special considerations.

## CONFIDENCE

- Dental anxiety can be a contagion and can throw any dentist off their game. For newly graduated dentists, consider taking a deep, calming breath before administering local anesthesia. Exude confidence and make the patient feel as comfortable as possible.

## MULTIPLE TECHNIQUES

- Though it is traditionally accepted that the dentist practice and perfect one technique, no single technique is infallible.
- Recommend that students and dentists develop proficiency in more than one technique.