

# Profound anesthesia made easy with the STA System

By Allen R. Helfer, DDS, MScD

As I looked at my student, I recognized the frustration and anxiety on his face. It was a look I remembered as one of my own in years past. "Dr. Helfer, can you please help me?" he said. "I have a patient with an acute pulpitis, a 'hot tooth.' I have given him four injections, and I still can't touch the tooth in order to open it up."

The tension in knowing you have used up all of your methodological options and failed not only occurs in dental schools but also in each and every dental office. It can very quickly ruin your so-called perfect day. When dealing with acute, exquisite pain you cannot dismiss the patient because the first thing the patient told you was, "I could not sleep the last two nights and all the pain killers have not worked." As an endodontist, 85 percent of my patients are from general dentists who refer to the office as we are the specialist with all the answers and are usually the court of last resort for pain relief for the patient.

Being that most of my patients are referrals, I not only have to satisfy the patient, but I also have to satisfy my referring dentist, which is equally as important. The patient is a short-term relationship, while my referrer is a long-term relationship. As one who is very concerned with practice management, the patient is the one who does public relations for you, not only to the referring dentist but also by word of mouth to his or her friends.

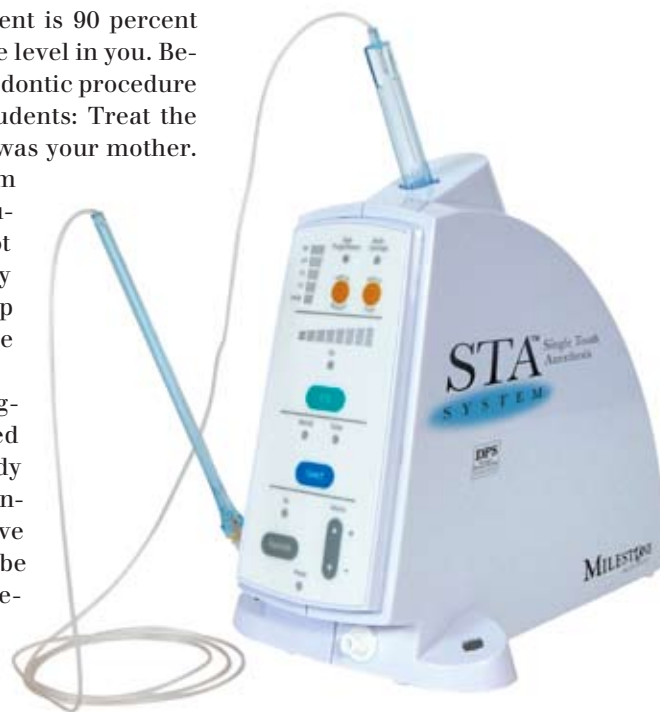
Therefore, the patient's experience in your office is crucial. This is how practices are built — one patient at a time. I have always maintained that the first

impression of the patient is 90 percent of his or her confidence level in you. Before teaching any endodontic procedure I always advise my students: Treat the patient like he or she was your mother. I can easily teach them cleaning, shaping, obturation, etc., but I cannot teach them sensitivity and compassion. I harp on that more than the procedures.

Once you've diagnosed and pinpointed the tooth, you are ready to begin. The next contact that you will have with the patient will be the anesthesia procedure. Most patients fear the needle more than the procedure itself, so this is a critical step for us as clinicians. This may be the first and last time we see this patient, so our first impression is crucial, especially knowing the patient will bring back to the referrer the experience, whether good or bad.

I have practiced endodontics for more than 40 years. I teach in dental schools and lecture throughout the world on the topic of "Stress-Free Predictable Endodontics." The question I am asked most is, "How do I get profound anesthesia in order to get access into the tooth?"

Up until a few years ago I did not have an answer. Now, fortunately, due to the Computer Controlled Local Anesthesia Delivery System (CCLAD) known as the STA Anesthesia System by Milestone Scientific, my endodontic procedures are stress-free for me and my patients.



**The STA System is manufactured by Milestone Scientific.**

My injections are more comfortable, predictable and accurate.

My experience has shown that the way you handle the anesthesia component gives the patient the ultimate confidence in your skill and talent. I have utilized the inferior alveolar nerve block all of my career, but it is certainly not foolproof. You have to hit the "bull's-eye." There are some patients who have all the symptoms of anesthesia, yet when you touch the tooth with a bur they feel it and you try and try again.

We were taught with the inferior alveolar injection to inject slowly to diminish discomfort — this is not easy. However, a slow, painless injection can be admin-



The STA System from Milestone Scientific allows dentists to offer their patients a slow, painless injection.

istered easily by a computer-controlled local anesthesia delivery system (STA™ System) manufactured by Milestone Scientific. The STA System addresses this problem precisely by controlling the flow rate of the injection so that the injection can be administered below the patient’s pain perception threshold. The technology is a feedback mechanism (dynamic pressure sensing) that tells the dentist in real time both visually and audibly whether he or she has placed the tip of the needle in the PDL space for a proper intraligamentary injection. The STA System also provides feedback that the needle has not moved during the injection, ensuring accuracy. This technique has the added advantage of profound anesthesia to a single tooth without causing numbness to the patient’s lips, tongue or the other teeth. This technique has made my love for endodontics even stronger.

Besides using the STA System for all my traditional injections, I also use it as a part of my diagnostic armamentarium. For example, if I cannot pinpoint the tooth with the acute pain, I will anesthetize just the tooth in question by means of an intraligamentary injection. If the pain goes away, I know it is that particular tooth. For example, if #14 (upper first molar) or #15 (upper second bicuspid) are the teeth in question, I would use the STA System to anesthetize the upper first molar. If the pain

## The benefits of the STA System from Milestone Scientific include the following:

- Gives you the ability to administer a predictable intraligamentary injection as your first injection with the positive feedback system DPS™.
- No collateral numbing with the intraligamentary injection.
- Ergonomic and lightweight.
- Patient-friendly vs. a traditional handpiece.
- Handpiece can be broken down to endodontic file size for incredible accessibility in the most difficult situations.
- Four convenient handpiece sizes to accommodate every injection.

disappears I know it is that tooth, and if it does not I know it is tooth #15. The STA System is a wonderful diagnostic tool for these difficult cases.

Another important benefit is with the use of the rubber dam. There are occasions whereby the rubber dam clamp sometimes impinges onto the gingival tissue and causes discomfort to the patient. With the gingiva completely anesthetized, the placement of the rubber dam and the clamp is completely painless for the patient. This will further assist you to complete the procedure stress free and more efficiently.

In summary, I found that my purchase of the STA System for my practice greatly enhanced how I practice day to day. I am now able to perform what I love without the anxiety and tension that I have experienced in years past. I also found that I am now getting referrals to my practice due to my injection technique.

How many referrals have you gotten with your traditional syringe?

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