

**STA** Single Tooth  
Anesthesia®  
**SYSTEM**

## ENHANCE YOUR PATIENT'S EXPERIENCE

---

Robert M. Bagoff DMD, FAGD, DICOI  
Steven M. Levenbrook DDS

**MILESTONE**  
SCIENTIFIC®

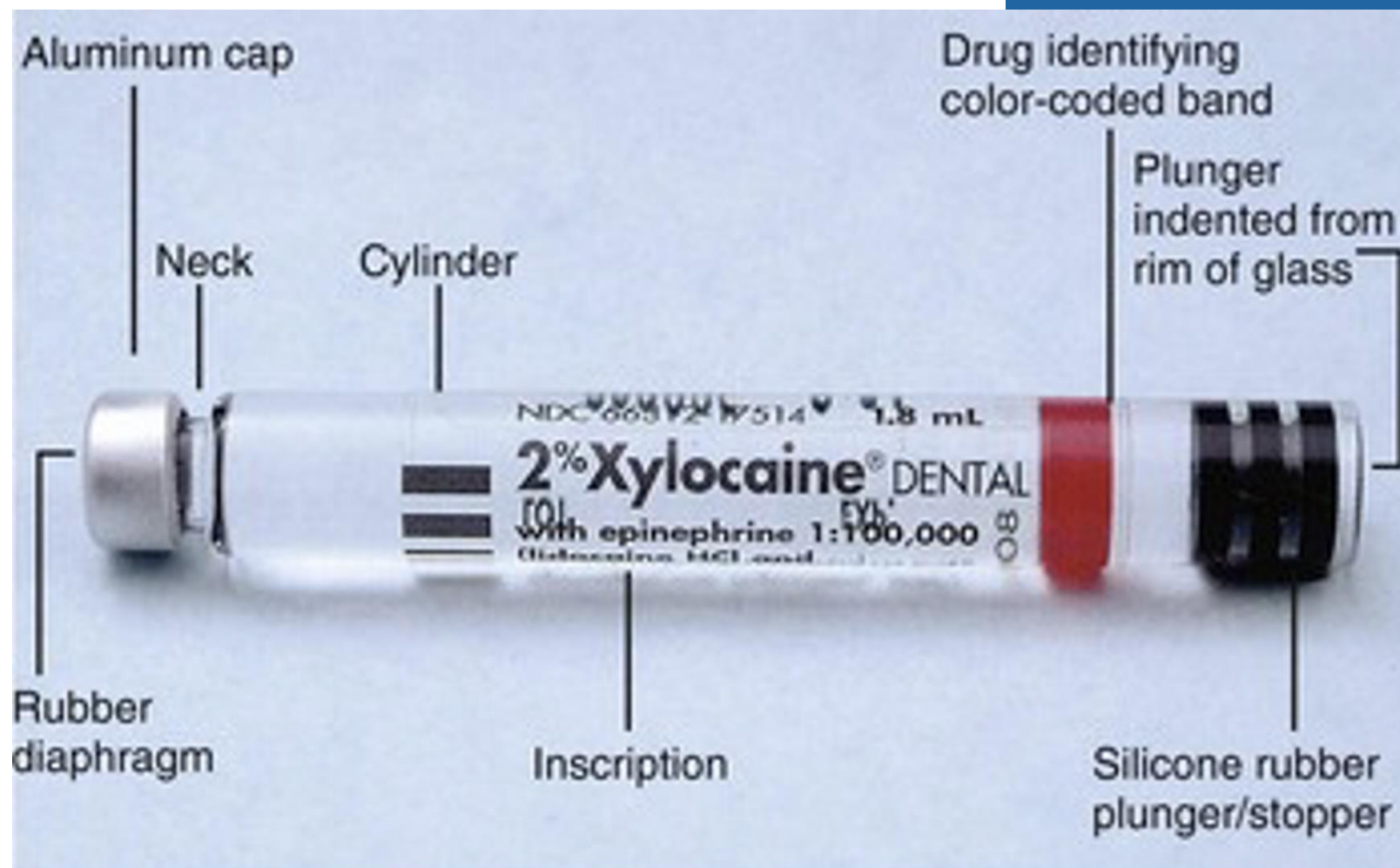


# FOLLOW US ON THE JOURNEY TO COMFORTABLE DENTAL ANESTHESIA

---

*DENTAL ANESTHESIA HAS BEEN AROUND SINCE THE FIRST TOOTHACHE.*

- 2250 B.C. Babylonian clay tablet
- 762 B.C.- Homer's Iliad-herbal remedies for pain control
- 1200 Theodoric of Luca-used sponges soaked with opium and mandragora [from the mandrake plant] for surgical pain relief, according to Britain's History of Anaesthesia Society
- CIRCA 1800 Nitrous oxide inhalation
- 1844 Horace Wells used nitrous oxide to extract his own tooth
- Circa 1847 chloroform used in dental anesthesia
- 1852-1922 Dr. William S. Halsted uses cocaine for the first regional (mandibular or jaw) nerve block with cocaine.”
- EARLY 1900 Alfred Einhorn - Novacaine(Procaine)1948 Lidocane – Nils Lofgren (Astra Pharma)
- 2000 (USA) Articaine





# WERE THERE RESUABLE SYRINGES AND NEEDLES?

---

Ron Wiltse, former BS Pharmacy, MBA, LCDR, USN,  
(Ret.) at Group Health Cooperative (1996-2008)

Yes they were used over & over. Growing up in my Dad's pharmacy, there were glass syringes and reusable needles. There was a small box of cleaning rods that were used to clean out tissue residue . The needles were cleaned out, run over a special sharpening stone and autoclaved — in steam at 15 pounds of pressure, which could kill pretty much anything. Dad was an army medic working in a laboratory. He said it was not unusual for improperly sharpened needles to develop a “hook” at the end that would draw out a needle- length streamer of tissue when it was withdrawn.

# PAINFUL INJECTIONS & NEEDLE PHOBIA

- If you're terrified of injections, you're not alone! The Adult Dental Health Survey (UK) 2009 found that 28% of respondents were 'extremely' anxious about having a dental injection. It is estimated that 3.5% to 10% of the population may be phobic of needles in general
- The STA Single Tooth Anesthesia System<sup>®</sup> is by far the most common system in the UK. Many people on our forum have said that they found the system hugely helpful for their needle phobia. It pretty much guarantees painless injections, because a computer controls the speed of the injection. And the few injections which could potentially be uncomfortable, even in skilled hands, can be done quite comfortably using STA."

\*\*\*Taken from : <https://www.dentalfearcentral.org/fears/needle-phobia/>

Written by the [Dental Fear Central Web Team](#) and reviewed by [Lincoln Hirst BDS](#)  
Last updated on January 17, 2021



*“... Local anesthesia delivery is the most frightening and painful procedure during dental treatment and therefore associated with the highest degree of disruptive behavior when compared to other dental procedures.”*

*Gibson et al., 2000; Allen et al., 2002; Palm, Kirkegaard & Poulsen, 2004; Rosenberg, 2002).*

## WHAT ARE THE USUAL DENTAL INJECTIONS? CAN THEY BE EASILY ADMINISTERED WITH THE STA SYSTEM?

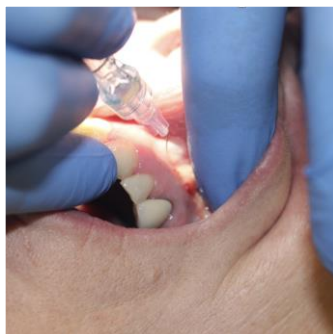
BUCCAL, PALATAL INFILTRATIONS	✓
INFERIOR ALVEOLAR BLOCK	✓
MENTAL BLOCK	✓
V2 (MAXILLARY DIVISION) BLOCK`	✓
PSA	✓
INFRAORBITAL	✓
PDL	✓
INCISIVE CANAL BLOCK	✓



**INFERIOR ALVEOLAR  
BLOCK**



**BUCCAL  
INFILTRATION**



**WHEEL OF LOCAL  
ANESTHETIC**



**APICAL BUCCAL  
INFILTRATION**



**ANESTHETIC  
BUCCAL  
INFILTRATION**



**APICAL ANESTHESIA  
BUCCAL  
INFILTRATION**



**BUCCAL  
INFILTRATION**



**WHEEL OF ANESTHETIC  
DURING BUCCAL  
INFILTRATION**



**PALATAL  
INFILTRATION**



**PALATAL  
INFILTRATION**



**APICAL ANESTHESIA  
BUCCAL INFILTRATION**



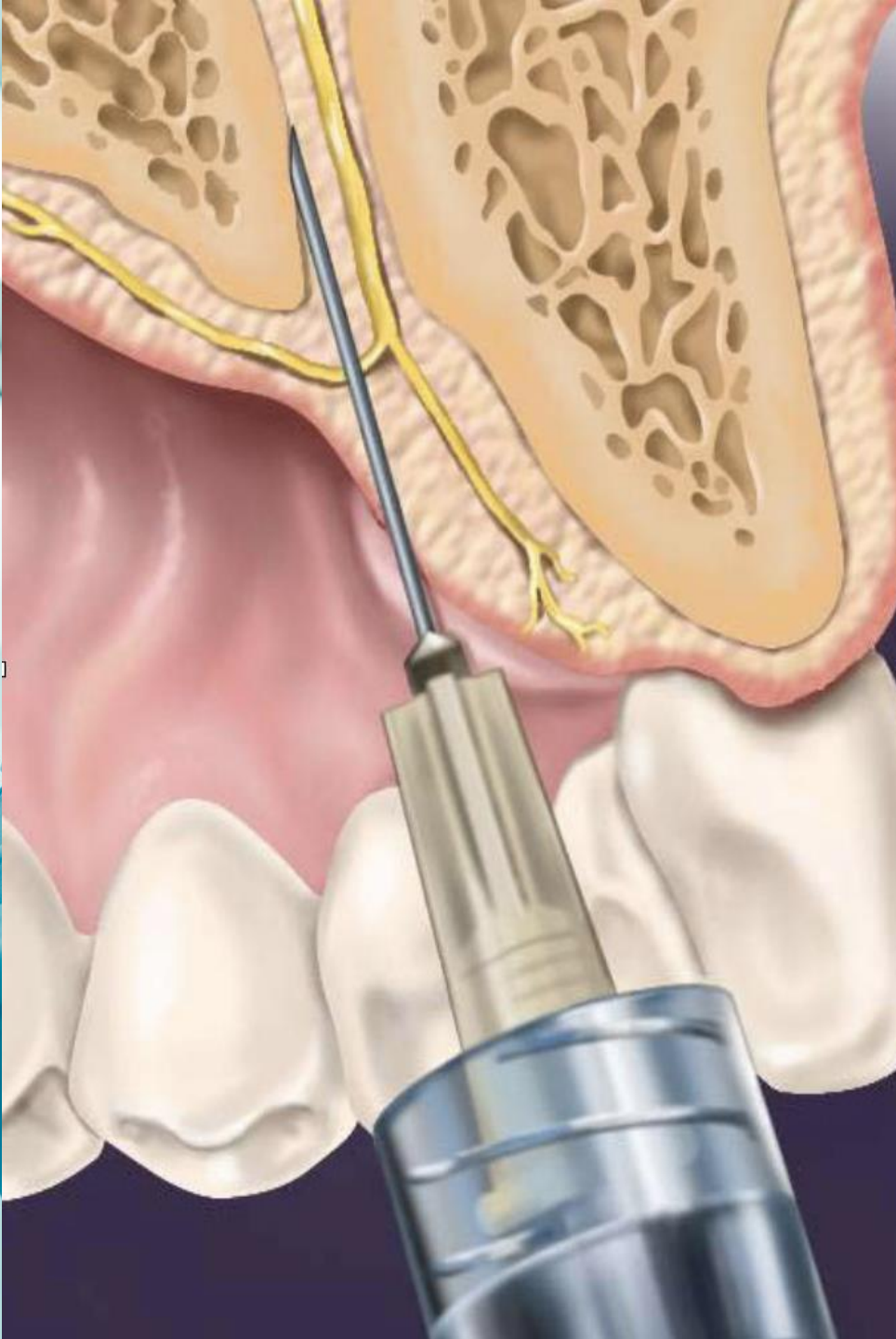
**PALATAL  
INFILTRATION**



# STA Single Tooth Anesthesia System® Instructional Video







# INJECTION TECHNIQUES

## PASA: Palatal Anterior Superior Alveolar Injection\*

- Single site injection for multiple maxillary teeth
- All maxillary incisors and canine teeth
- No collateral anesthesia to the face or lips
- Reduced anesthetic dosage
- Improved clinical efficiency
- No risk of intravascular injection

Friedman MJ, Hochman MN, *J Esthetic Dent*, April 1999



## INJECTION TECHNIQUES

### PASA: Palatal Anterior Superior Alveolar Injection\*

- Only technique crossing the midline
- Accurate smile line assessment

Friedman MJ, Hochman MN, *J Esthetic Dent*, April 1999



# INJECTION TECHNIQUES

## AMSA: Anterior Middle Superior Alveolar Injection\*

- Single site injection for multiple maxillary teeth
- Single injection for multiple maxillary teeth central incisor through mesial root of the first molar
- 
- No collateral anesthesia of the facial tissue or lips
- Reduced dosage of anesthesia
- Improved clinical efficiency
- No risk of intravascular injection
- Accurate smile line assessment

\*Friedman M, Hochman M *Compendium Cont. Ed.* Oct 1997

\*Friedman M, Hochman M *Quintessence Int* May 1998





# INJECTION TECHNIQUES

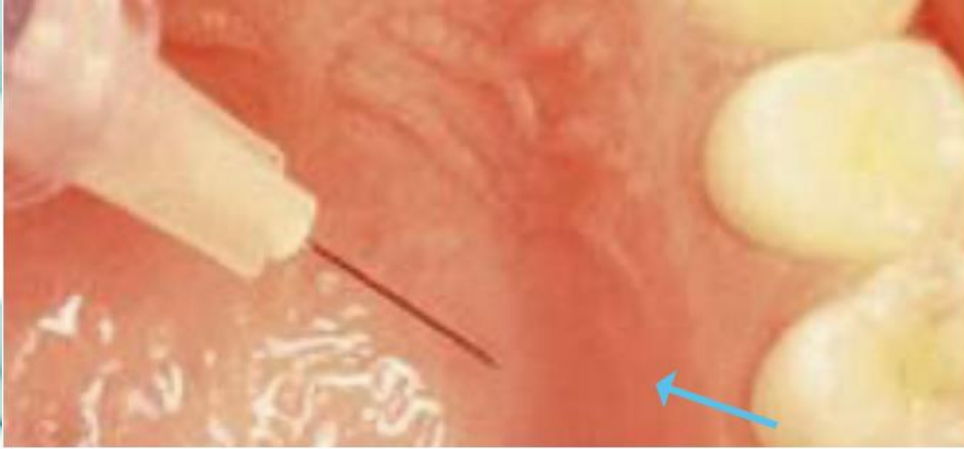
## AMSA: Anterior Middle Superior Alveolar Injection\*

- Avoids the annoying droopy lip syndrome
- AMSA allows accurate smile line assessment
- Single palatal approach
- Use control flow rate exclusively
- Pre-puncture technique provides topical anesthesia to the palate

\*Friedman M, Hochman M *Compendium Cont. Ed.* Oct 1997

\*Friedman M, Hochman M *Quintessence Int* May 1998





## AMSA LANDMARKS

### Anterior Middle Superior Alveolar Injection\*

- Midway between free gingival margin of the premolars and the mid palatine suture
- Bisects premolars or deciduous molars



# STA SYSTEM PRACTICE APPLICATION

---

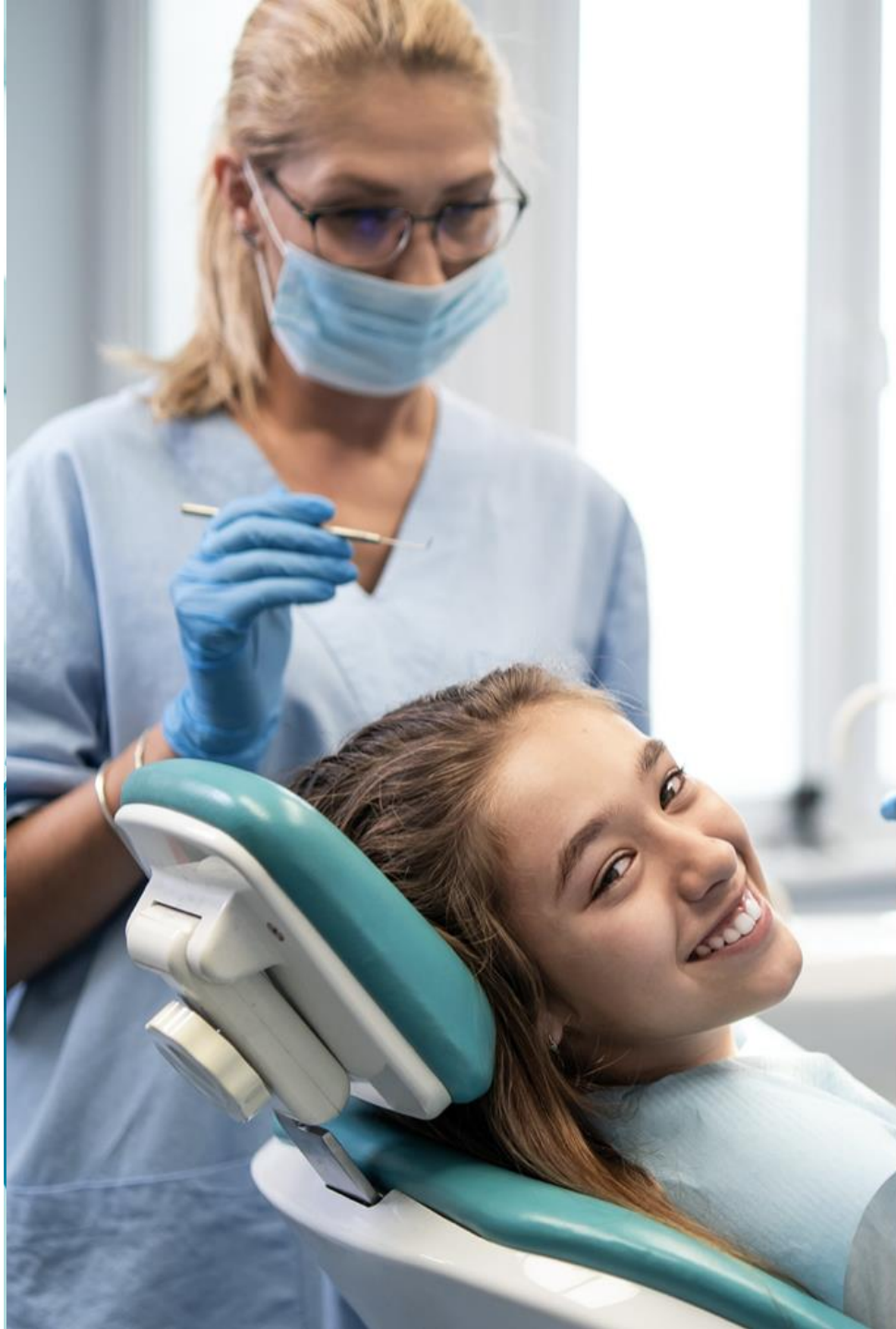
## For Esthetic Dentistry

### AMSA

- Allows accurate smile assessment
- Single site injection to anesthetize multiple maxillary teeth
- Bi-lateral AMSA's give anesthesia of 8 - 10 maxillary teeth without the droopy lip syndrome

### P-ASA

- Anesthetize 6 maxillary anteriors from a single injection
- Perform esthetic dentistry without the droopy lip



# WIN, WIN, WIN

## For Esthetic Dentistry

### Dentist

- Injections are easier and less stressful to administer
- More successful
- Latest technology and injection techniques

### Patient

- Injections are more comfortable and less stressful
- No collateral numbness

### Practice

- Increased efficiency and productivity
- Fewer cancellations
- Increased patient referrals and practice profits
- Great for marketing platforms, social media, etc...

# THANK YOU

---

[www.milestonescientific.com](http://www.milestonescientific.com)

Robert M. Bagoff DMD, FAGD, DICOI  
Steven M. Levenbrook DDS