
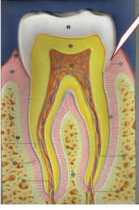


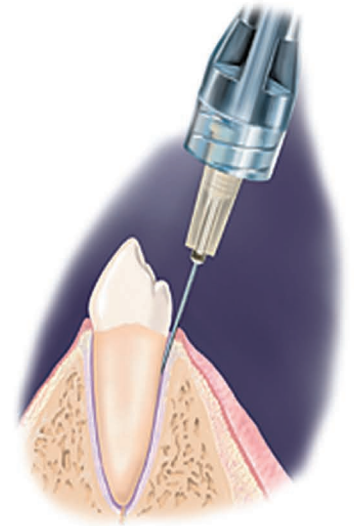


# STA - Intraligamentary Injection

1. 
  - Verify the STA mode is ON
  - Place the needle passively in the gingival sulcus at about a 45 degree orientation to the vertical
  - Keep the bevel towards the tooth
2. 
  - Maintain the needle's 45 degree orientation
  - As the flow of anesthetic is started and Cruise Control is engaged, slowly and gently move the needle apically
3. 
  - Continue to slowly move the needle apically until resistance is felt at the top of the PDL space
  - Hold the needle in place with minimal pressure
  - Wait for the STA sound and light indicators to begin
4. 

**INCORRECT TECHNIQUE**

  - Wrong Needle orientation (too vertical, not 45 degree)
  - Needle too deep into the PDL space
  - Excessive pressure on needle



## Drug dose volume suggestion







These are suggested anesthetic volumes only and not to imply definitive recommendations. It is understood that it is the responsibility of each practicing dentist to utilize his/her clinical judgement as to an appropriate volume to be administered for each individual patient. It is recommended that the dentist reference clinically accepted recognized sources, i.e. textbooks and recent dental publications for the currently accepted standards toward the treatment of the dental patient.

Injection Type	Needle Size	Suggested Anesthetic Volumes				Anesthetic Duration Minutes	Anesthetic Area
		Articaine 4% (1.7 ml) 1:200,000 or 1:400,00		Lidocaine 2% (1.7 ml) 1:100,00			
		or		Preferred formulation of Lidocaine HCL is 1:100,000 when available			
		Preferred formulation of Articaine HCL is 1:200,000 or 1:400,000 when available				Adult	Child
Mandibular Block Injection	27G 1 ¼"	¾ - 1	½ - ¾	¾ - 1	½ - ¾	60 - 90	Mandibular Right or Left Quadrants
AMSA Injection	30G ½"	½	¼	¾ to 1	¼ - ½	60 - 90	Palatal, Pulpal, Buccal Central thru 2nd Premolar
Intraligamentary Injection (Molar) *	30G ½"	1/4 distal-lingual 1/4 mesial-lingual	1/4 distal-lingual 1/4 mesial-lingual	1/2 distal-lingual 1/2 mesial-lingual	1/4 distal-lingual 1/4 mesial-lingual	45 - 60	Mandibular Teeth Pulpal, Buccal, Lingual Start on Distal First
		1/4 distal-buccal 1/4 mesial-buccal	1/4 distal-buccal 1/4 mesial-buccal	1/2 distal-buccal 1/2 mesial-buccal	1/4 distal-buccal 1/4 mesial-buccal		Maxillary Teeth Pulpal, Buccal, Lingual Start on Distal First
Infiltration Injection	30G 1	¾ - 1	½ - ¾	¾ - 1	¾ - 1	60 - 90	Pulpal, Buccal
PSA	30G ½"/1"	¾ - 1	½ - ¾	¾ - 1	¾ - 1	60 - 90	Buccal, Pulpal Upper Molars
P- ASA	30G ½"	½	¼	¾ to 1	¼ - ½	60 - 90	Pulpal, Palatal, Buccal Maxillary Incisors


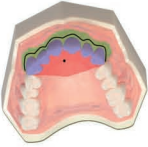


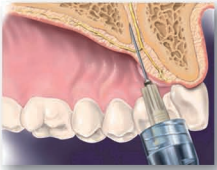


\* Direct vision of the needle position within the sulcus is critical at all times, therefore, a buccal approach may be required. A slight bending of the needle (approx. 10-15 degrees) towards the bevel to gain proper position within the PDL space is suggested when needed.

Mutiple bending of dental needles can weaken the metal and result in breakage and possible patient injury. It is suggested only a single slight bend be performed when necessary.

## AMSA Anterior Middle Superior Alveolar Block

1.  
  - Orient a 30 ½ gauge, bevel to the palatal tissue, at the landmark which bisects the premolars and is midway between the free gingival margin and the mid palatine suture
  - Place topical anesthetic on the palatal tissue if desired.
2.  
  - Place a sterile cotton tip applicator to absorb any anesthetic drip prior to needle penetration.
  - Keep the bevel towards the Tissue
  - Perform pre-puncture technique.
  - Rotate needle slightly upon entering tissue and during movement to final site.
3.  
  - Initiate the slow flow rate at the moment that the needle enters the palatal tissue.
  - Reorient needle to 45° and advance the needle very slowly until it contacts bone
  - Continue to inject until the volume has been deposited.
  - Remove the needle slowly and try to avoid any excess anesthetic dripping.

## PASA Palatal Anterior Superior Alveolar Block

1.  
  - Orient a 30 ½ gauge extra-short needle in the groove just lateral to the incisive papilla.
  - Place topical anesthetic on the incisive papilla if desired
2.  
  - Use a sterile cotton tip for the pre-puncture technique.
  - Initiate the slow flow rate throughout the injection.
  - After 8 - 10 beeps initiate axial rotation and VERY SLOW forward movement.
  - Once the needle bevel enters below the papilla, pause movement for 5 - 6 seconds.
3.  
  - After papilla is blanched, re-orient the needle vertically to gain entrance to the nasopalatine canal with slow axial rotation.
  - Contacting the inner bony wall, stop movement and aspirate.
4. 
  - DO NOT EXCEED 1 cm (length of 1/2" needle) penetration into the canal.
  - If aspiration is negative, maintain position and deliver anesthetic at the slow rate..
  - Remove needle slowly to avoid excess dripping into the mouth.