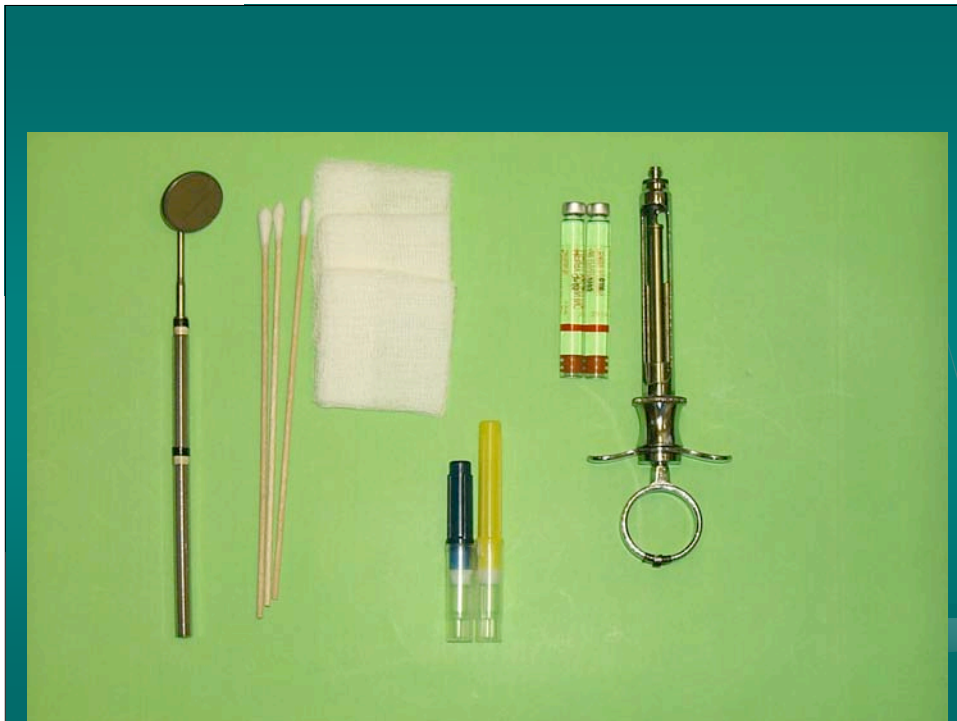
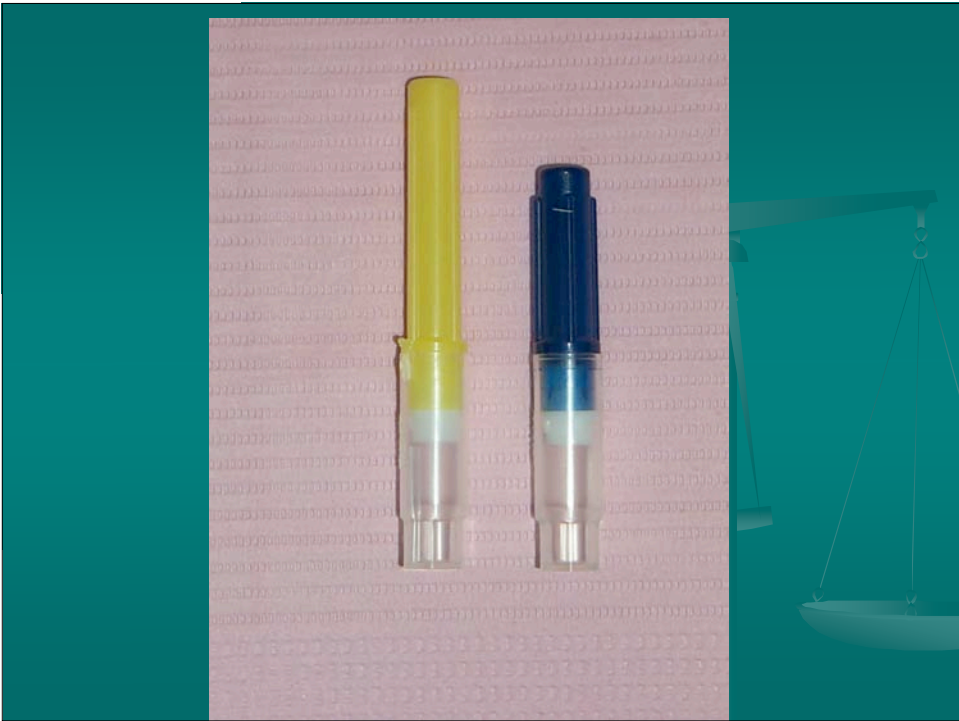
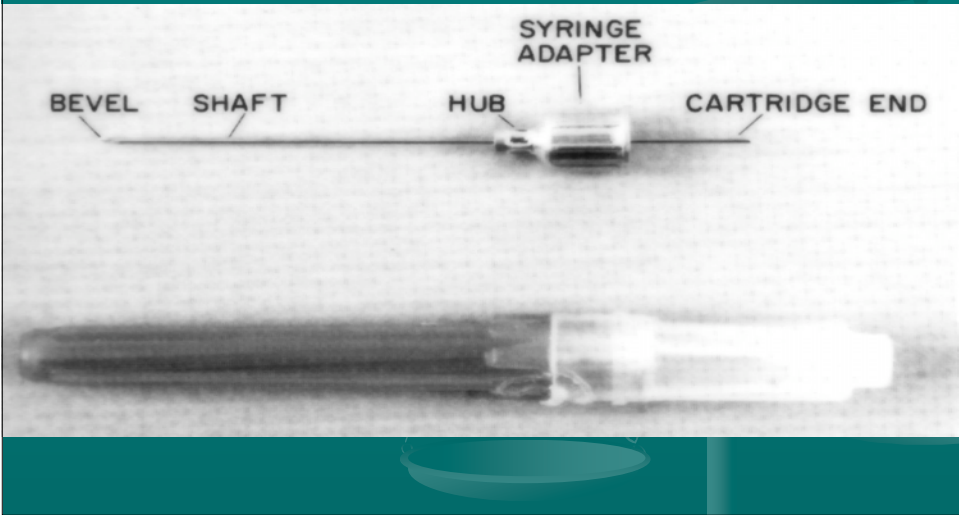


Maxillary and Mandibular Anesthesia Techniques

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College of Dental Medicine



The Needle



Gauge

- Interior diameter of the lumen of the needle
- The smaller the number, the greater the diameter of the needle

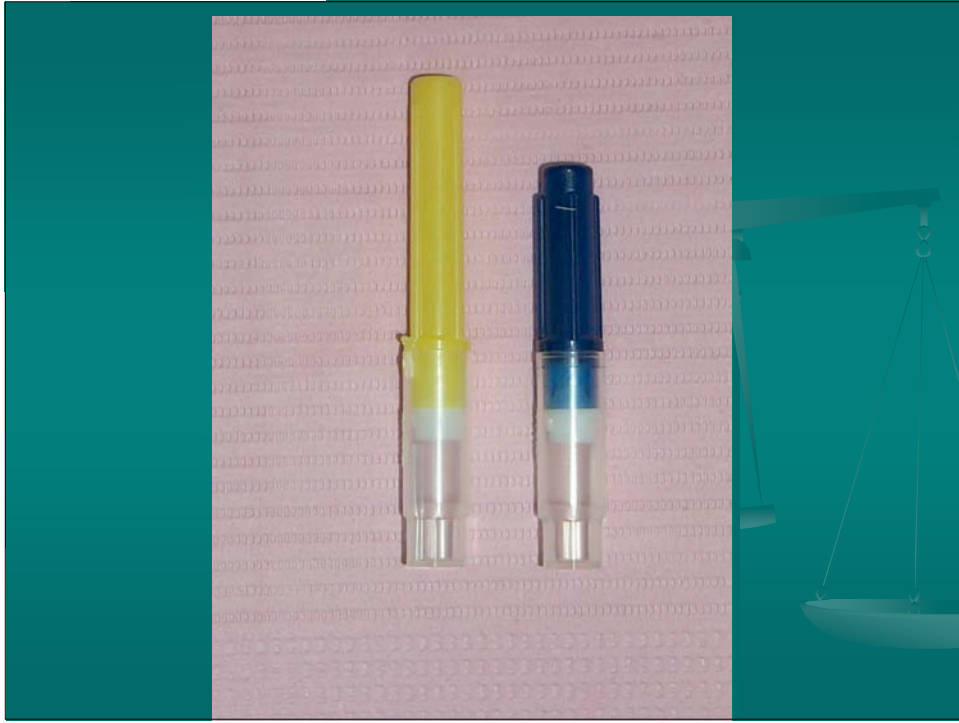
25 ga. – 0.0095 inches

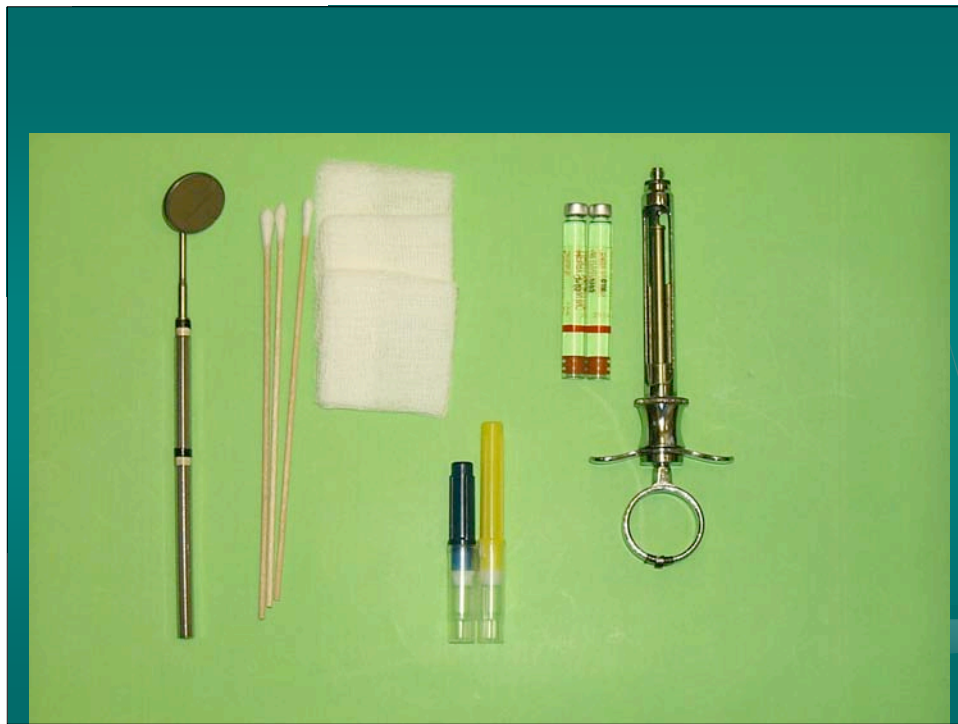
27 ga. – 0.0075 inches

30 ga. – 0.0060 inches

Length

- Long – 1 5/8 inches or 40 mm.
- Short – 1 inch or 25 mm.





Local Anesthesia Techniques

- Infiltration (Supraperiosteal)
- Nerve block
- Intraaligamentary
- Intrapulpal

Maxillary Anesthesia

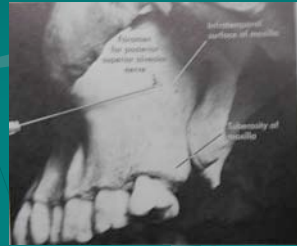
- Local infiltration (Buccal or palatal)
- Nerve block
 1. Posterior superior alveolar
 2. Infraorbital
 3. Greater palatine
 4. Nasopalatine (Incisive)
 5. Maxillary nerve (V2)

Clinical Technique

TABLE 16-4. Regional analgesia of the maxilla

Nerves anesthetized	Areas anesthetized
Posterior superior alveolar nerve	Maxillary molars (except mesiobuccal root of first molar); buccal alveolar bone and soft tissues; lining of maxillary sinus corresponding to the molar teeth
Middle superior alveolar nerve	Mesiobuccal root of first molar; premolars; corresponding buccal alveolar bone and soft tissues; lining of maxillary sinus
Anterior superior alveolar nerve	Canines, lateral incisors, central incisors; corresponding buccal alveolar bone and soft tissues
Greater palatine nerve	Hard palate and overlying mucosa from molars to first bicuspid
Nasopalatine nerve	Hard and soft tissues of the entire anterior hard palate to the canines bilaterally
Infraorbital nerve	Lower eyelid, side of nose, upper lip; areas supplied by the middle and anterior superior alveolar nerves

Posterior Superior Alveolar Block (PSA)



PSA



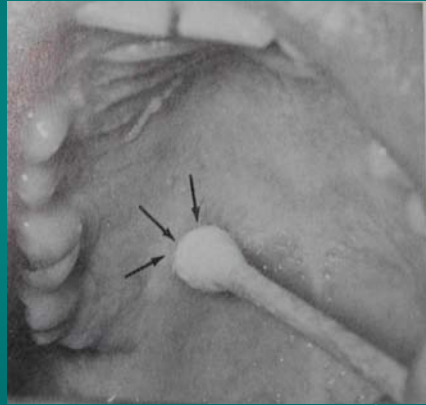
MSA



Infraorbital



Greater palatine block



Nasopalatine (incisive) block



V2 block



V2 block



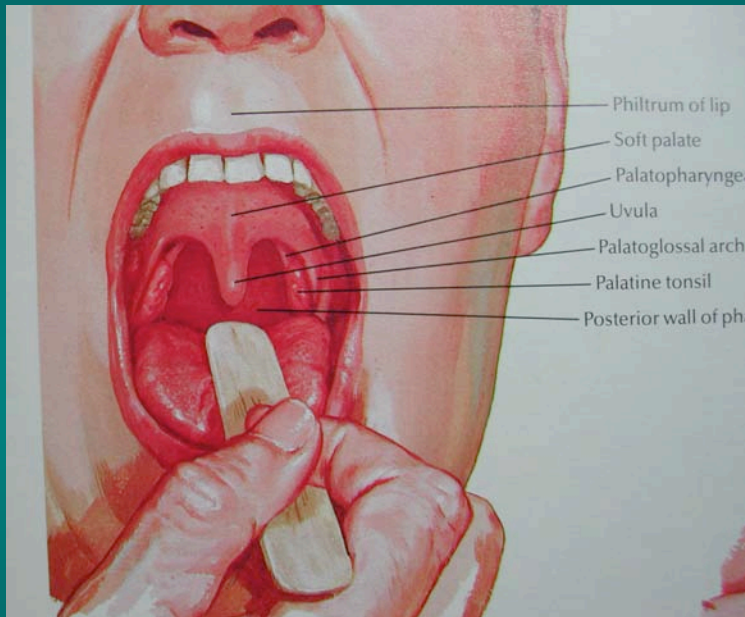
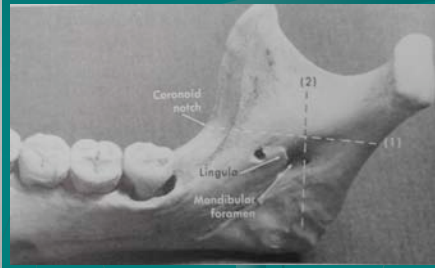
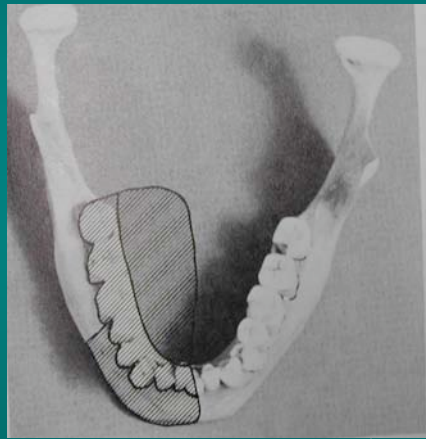
Mandibular Anesthesia

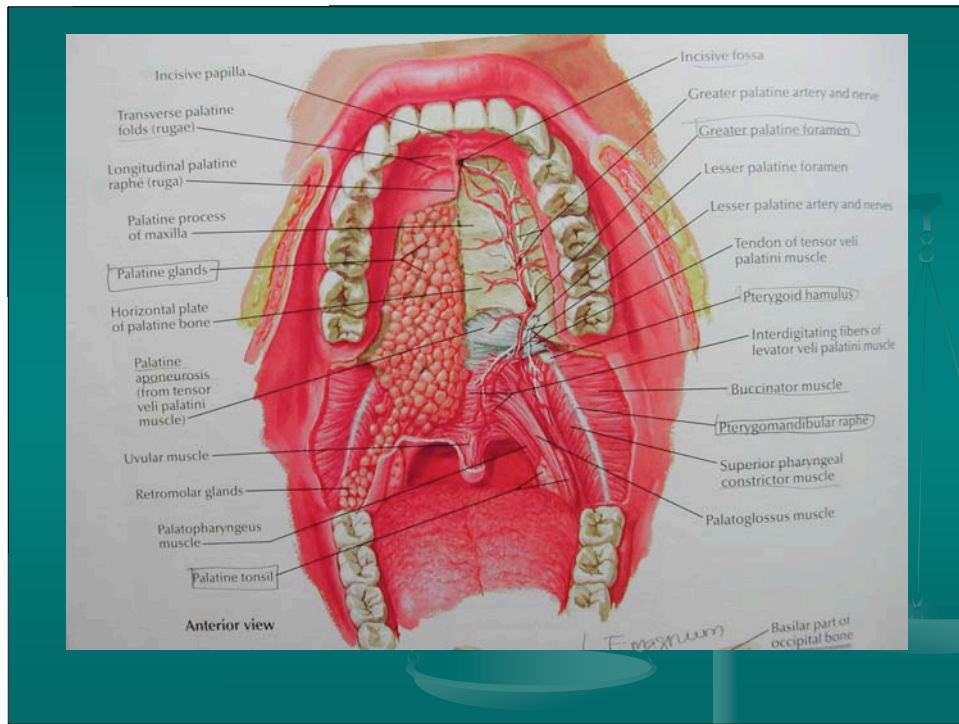
- Infiltration ??
- Nerve block
 1. Inferior alveolar / Lingual
 2. Mental
 3. Buccal
- Others (Alternates)
 1. Gow-Gates (High Mandibular)
 2. Akinosi (Closed-mouth)

Clinical Technique

TABLE 16-5. *Regional analgesia of the mandible*

Nerves anesthetized	Areas anesthetized
Inferior alveolar nerve	Mandibular teeth; surrounding hard and soft tissues unilaterally to the midline (does not innervate buccal soft tissue in the molar area)
Lingual nerve	Mucosa of floor of mouth, anterior 2/3 of tongue; lingual gingiva
Long buccal nerve	Mucosa of cheek; buccal mucosa and mucoperiosteum of molar region
Mental nerve	Buccal gingiva; mucoperiosteum from bicuspids to midline; skin of chin and lower lip (does not innervate teeth)
Incisive nerve	First bicuspid, canine, incisor unilaterally to the midline; areas innervated by the mental nerve





Proper techniques in IANB

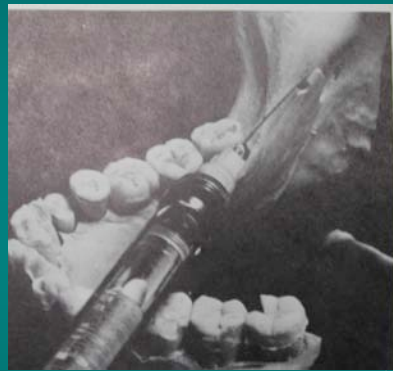
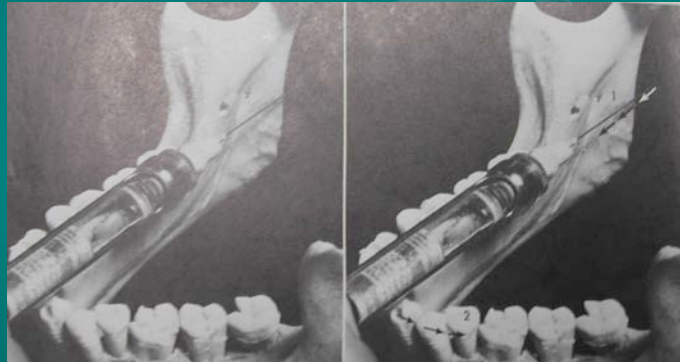


Fig. 14-9. A, The needle is located too far anteriorly (laterally) on the ramus. B, To correct: Withdraw it slightly from the tissues (1) and bring the syringe barrel anteriorly toward the lateral incisor or canine; reinsert to proper depth (2).

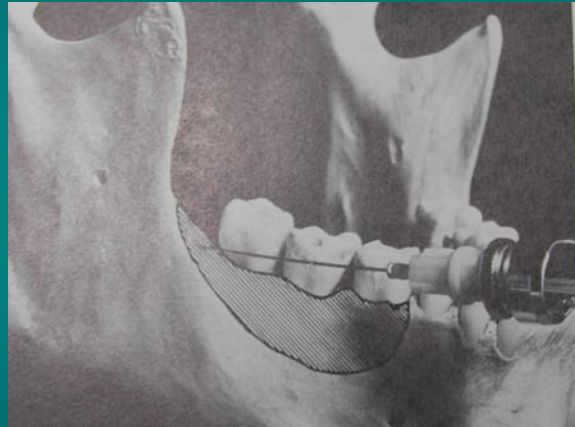
Proper techniques in IANB



Mylohyoid branch



Long buccal



Gow Gates and Akinosi

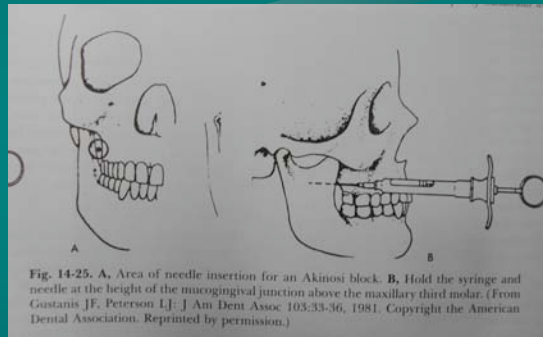


Fig. 14-25. A, Area of needle insertion for an Akinosi block. B, Hold the syringe and needle at the height of the mucogingival junction above the maxillary third molar. (From Gustafson JF, Peterson LJ: J Am Dent Assoc 105:33-36, 1981. Copyright the American Dental Association. Reprinted by permission.)

Mental Nerve and Incisive Nerve Block

