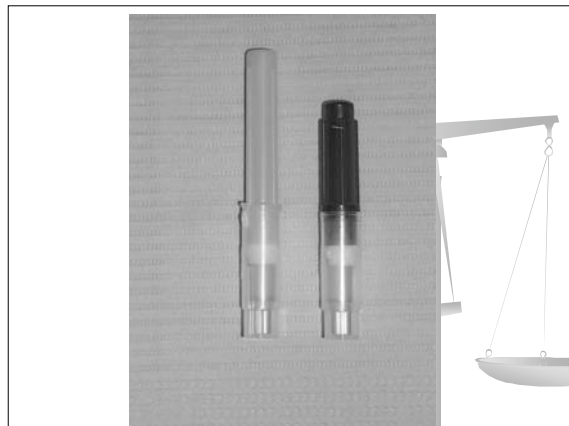
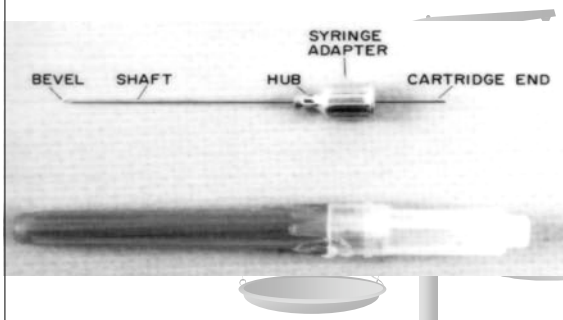


# Maxillary and Mandibular Anesthesia Techniques

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## The Needle

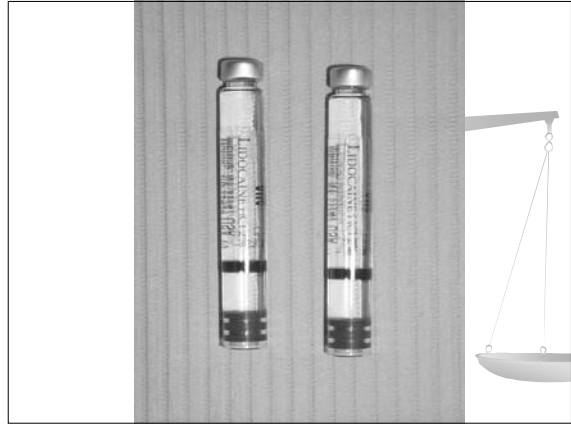
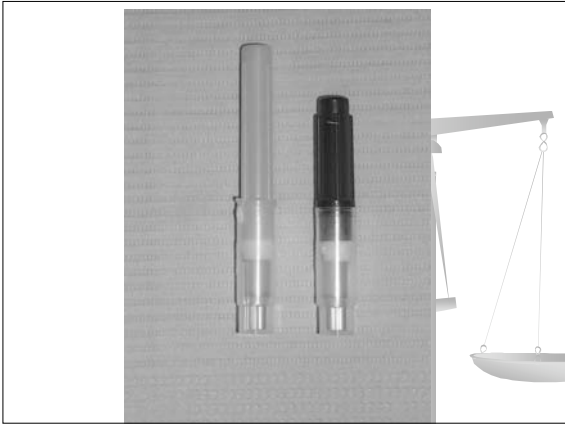


## Gauge

- 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
- Intraalveolar
- Intrapulpal

### Maxillary Anesthesia

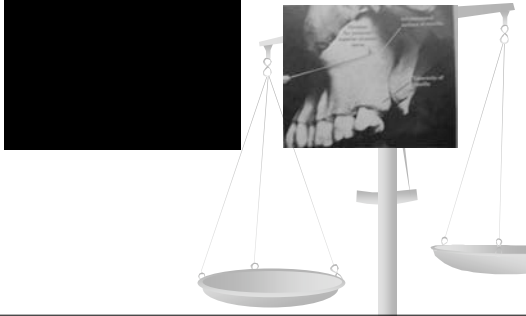
- Local infiltration (Buccal or palatal)
- Nerve block
  1. Posterior superior alveolar
  2. Infraorbital
  3. Greater palatine
  4. Nasopalatine (Incisive)
  5. Maxillary nerve (V2)

### 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 bicuspsids
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

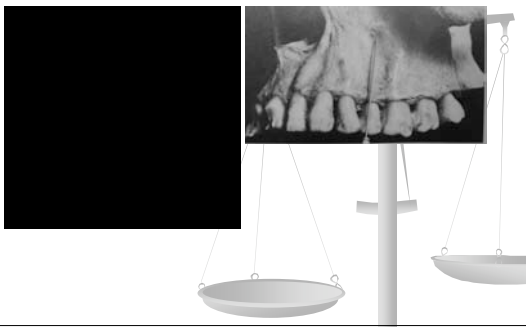
**Posterior Superior Alveolar Block (PSA)**



**PSA**



**MSA**



**Infraorbital**



**Greater palatine block**



**Nasopalatine (incisive) block**



## V2 block

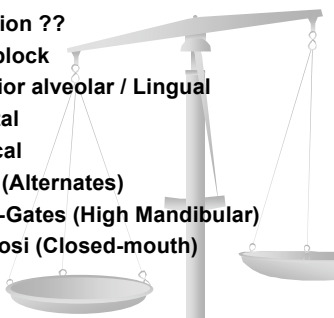


## V2 block



## Mandibular Anesthesia

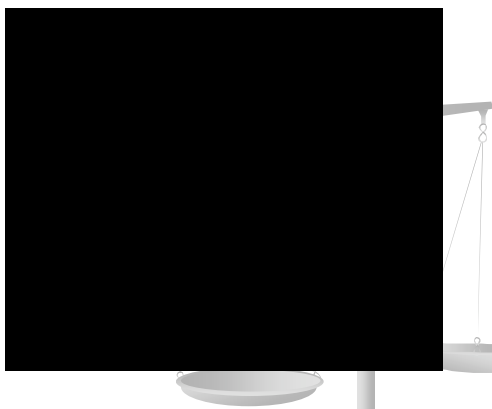
- Infiltration ??
- Nerve block
  1. Inferior alveolar / Lingual
  2. Mental
  3. Buccal
- Others (Alternates)
  1. Gow-Gates (High Mandibular)
  2. Akinosi (Closed-mouth)

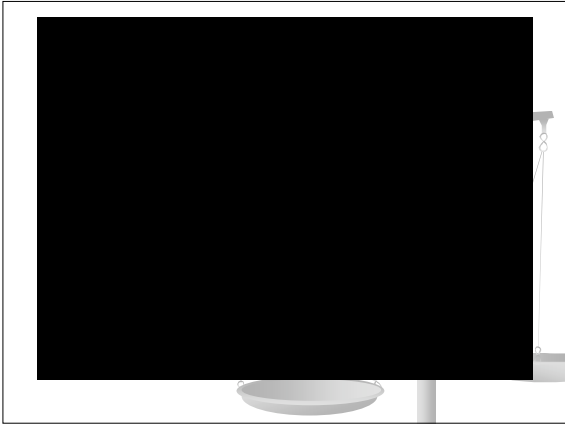


## Clinical Technique

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

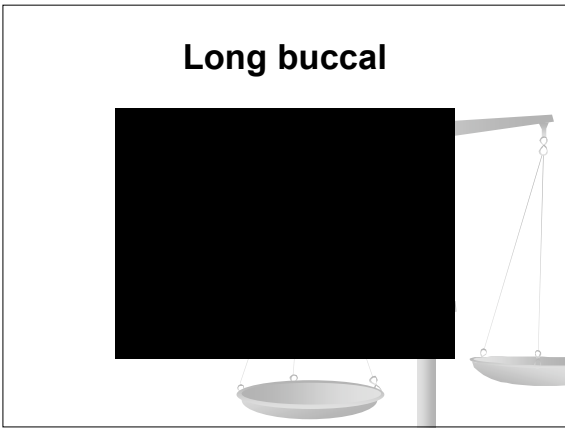
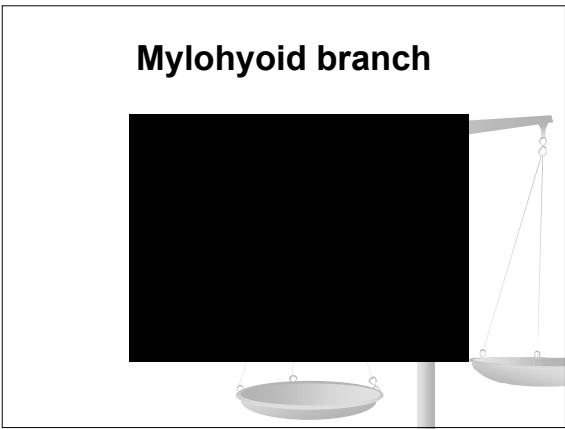




### Proper techniques in IANB

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; reinject to proper depth (2).

### Proper techniques in IANB



### 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 mesioangular junction, above the mylohyoid ridge. (From Giacomini JJ, Peterson LJ, J Am Dent Assoc 105:55-56, 1981. Copyright the American Dental Association. Reprinted by permission.)

## Mental Nerve and Incisive Nerve Block

