

Clinical Anatomy

Buccal Nerve Block

Anterior branch of Mandibular nerve (V3)

Provides buccal soft tissue anesthesia adjacent to mandibular molars and supplies buccal gingiva and mucosa of the mandible from the area of the 3th molar to the canine

Not required for most restorative procedures

Advantages and Disadvantages

Advantages

Technically easy

High success rate

Disadvantages

Patient may feel some discomfort

Anaesthesia Landmarks

Mandibular molars

Mucobuccal fold

Buccal Nerve Technique

Technique

- Apply topical anaesthesia
- Insert the needle distal and buccal to the last molar
- Target - Long Buccal nerve as it passes the anterior border of ramus
- Insert approximately 2 mm and aspirate
- Slowly inject 0.3 ml of solution

If successful...

- Successful execution of this technique results in anesthesia of the buccal soft tissue of the mandibular molar region

Inferior Alveolar Nerve Block

- The Vazirani-Akinosi technique has several advantages over techniques such as Gow-Gates.
- It is useful in trismatic patients and those with ankylotic temporomandibular joint; in addition, it is less traumatic and has a lower complication rate.
- Vazirani-Akinosi technique is less effective than the Gow-Gates technique and has a longer onset time.

Technique

- The patient is placed in a semisupine position or on a dental chair with their mouth closed.
- The operator stands on the same side as the block to be performed.
- Anatomic landmarks include the following:
 - Gingival margin over the second and third maxillary molars
 - Pterygomandibular raphe
- The aim is to enter the pterygomandibular space.
- The cheek is retracted using a retractor, and the patient is asked to occlude the teeth gently. The needle is inserted over the medial aspect of the mandibular ramus, parallel to the occlusal plane at the height of the mucogingival junction of the second and third molars

If successful...

- Successful execution of this technique provides anesthesia of the mandibular teeth up to the midline and associated buccal and lingual hard and soft tissue. The anterior two thirds of the tongue and floor of the mouth are also anesthetized.

Lateral Pharyngeal Space

- It is conical shaped

Bounded by the....

- lateral wall of the pharynx
- medial pterygoid muscle
- styloid process
- associated attached muscles and ligaments
- parotid gland.

It contains the..

- Internal Carotid Artery
- Internal Jugular Vein
- Glossopharyngeal nerve
- Hypoglossal nerve
- Vagus nerve
- Accessory Nerve

It communicates directly with the submandibular space and the brain by the way of the foramina of the skull

Lateral Pharyngeal Space Abscess

- Infections of the space originate in the region of the 3rd molar.
- Infections are a result of the spread of infection from the Submandibular and pterygomandibular spaces.
- Pain radiates to the ear, trismus
- Patients experience difficulty in swallowing and elevated temperature

Treatment

- Drainage of the abscess can be extraoral
- Excision 2cm long inferior or posterior to the body of the mandible
- Intraoral drainage – may be difficult and risky due to aspiration of pus