Local anesthesia at the stomatology operations in the conditions of policlinic and permanent establishment. Kinds and facilities.

Description of anesthetics.

Potentiating anaesthetizing.

Complication at the local anaesthetizing, their prophylaxis and medical treatment.

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CLASSIFICATION OF THE LOCAL ANESTHESIA

INJECTION

NERVE BLOCK
- *Central*
- *Peripherals*

TOPICAL (INFILTRATION)

METHOD OF THE "CREEPING INFILTRATION"
SPONGIFORM
INTRA-PULPARIS
INTRA-LIGAMENTARIS
LESS NEEDLE METHOD

NONINJECTION
(TOPICAL)

CHEMICAL – APPLICATION
PHYSICAL
PHYSICOCHEMICAL
REFLEXOANALGESIA

A. Topical anaesthesia:

The application of ointments or solutions containing local anaesthetic compounds to accessible structures, e.g. skin and mucous membrane is called topical anaesthesia. In such condition the anaesthetic agent penetrates through the epithelium and renders the area insensible by its effect on the free nerve endings. Topical anaesthesia is useful as it permits the painless insertion of sharp needles and also for simple superficial procedures.

B. Infiltration anaesthesia:

Infiltration anaesthesia is achieved when the terminal nerve endings supplying the operative area are flooded by the diffusion of the injected anaesthetic solution rendering them incapable of becoming stimulated. Here two kinds could be differentiated:

1. Soft Tissue Infiltration

This is achieved in the oral cavity by submucosal injections or paraperiosteal injection. In performing sumbucosal injections the needle is inserted beneath the mucosal layers and the solution is deposited and then diffuses in that particular plane. In performing sub-periosteal injections, the needle should be inserted till it contacts the periosteum, this is known as the needle meets resistance and no attempt should be made to force the needle further towards bone.

2. Bony Tissue Infiltration:

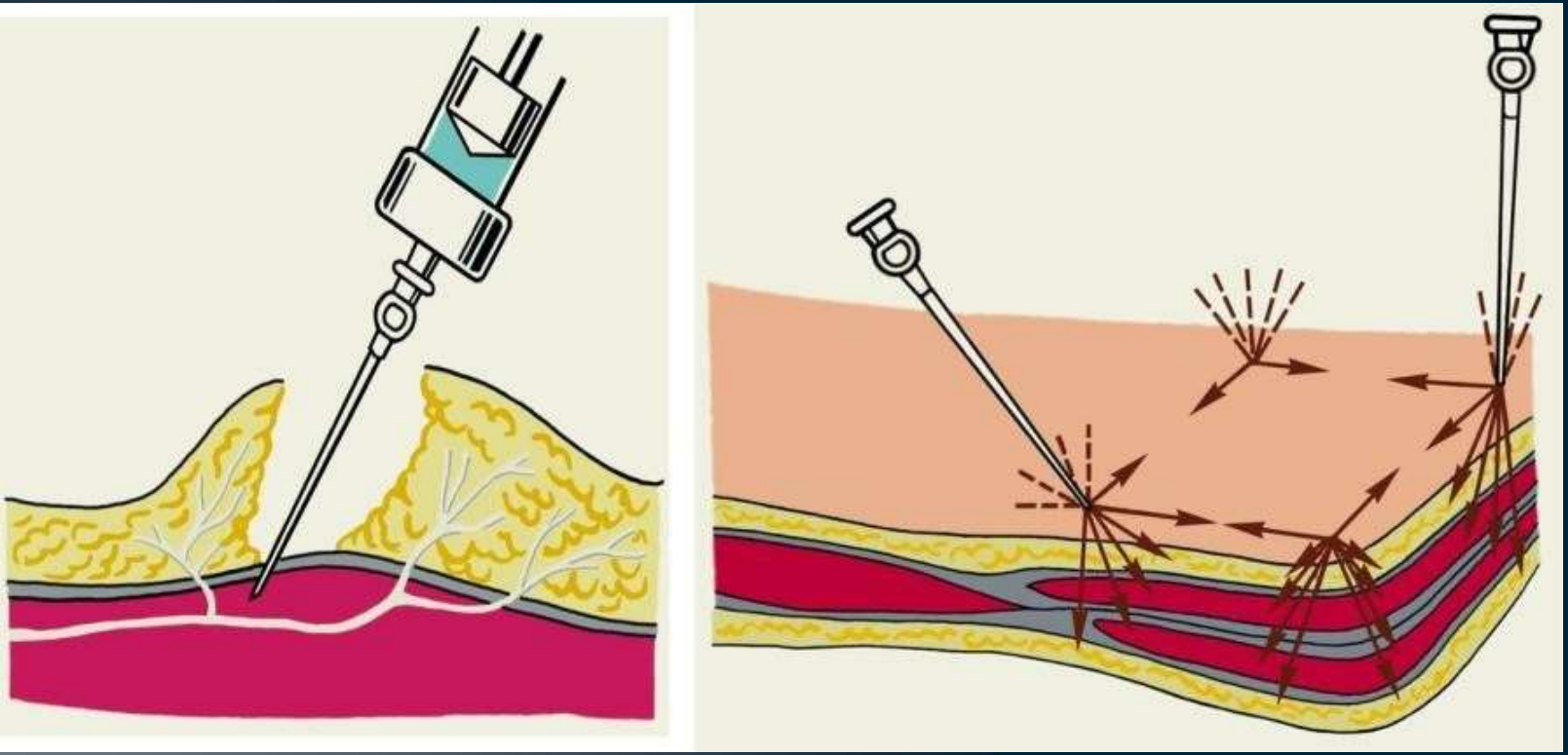
It is also called intraosseous injection. In this technique the bony cortex is penetrated and the anesthetic solution is injected into the lacuna of the bone where, by diffusion, the terminal nerve endings in the operative area are anaesthetized.

C. Nerve block anaesthesia:

The anaesthetic solution is deposited extraneurally or paraneurally in close proximity to the main nerve trunk supplying the operative area at an accessible point along its course to the periphery of the region, and before it divides into its terminal branches; thus prevent afferent impulses from travelling centrally beyond that point.

It is obvious from the previous discussion that there is a variety of methods where by one can block the pathway of painful impulses. This is very fortunate, and the choice of a method depends on several factors considering that the best method is the simplest and most atraumatic technique which utilizes minimal anaesthetic solution to produce the desired effect.

METHOD OF THE "CREEPING INFILTRATION"



THE LOCAL ANAESTHETICS CAN BE GROUPED ACCORDING TO THEIR CHEMICAL STRUCTURES

I.Benzoic acid esters:

Metycaine.

Kinacine.

Baycaine.

II. Para-amino-benzoic acid esters:

Procaine (novocaine)

Tetracaine (pontocaine)

Monocaino.

Ravocaine.

III.Meta-amino-benzoic acid esters:

Unacaine,

Primacaine.

IV. Para-ethyoxbenzoic acid esters:

1. Intracaine.

V. Anilide (nonestar type):

Lidocaine (xylocainesti).

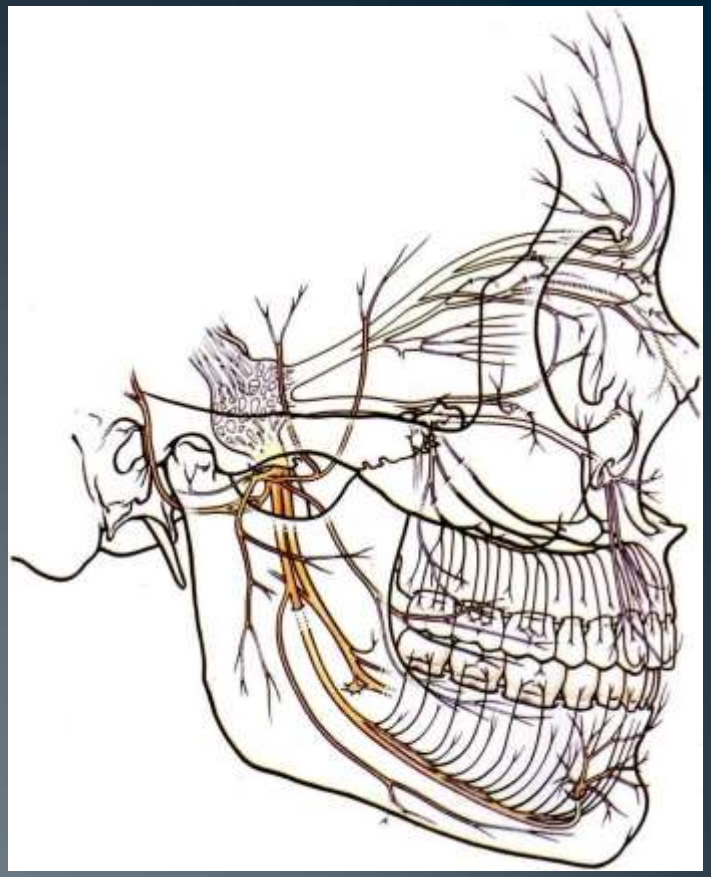
Carbocaine.

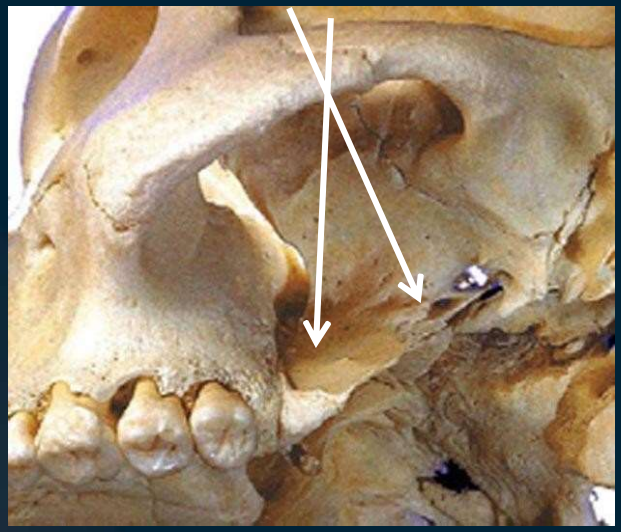
Prilocaine (citanesti).

Ultracaine.

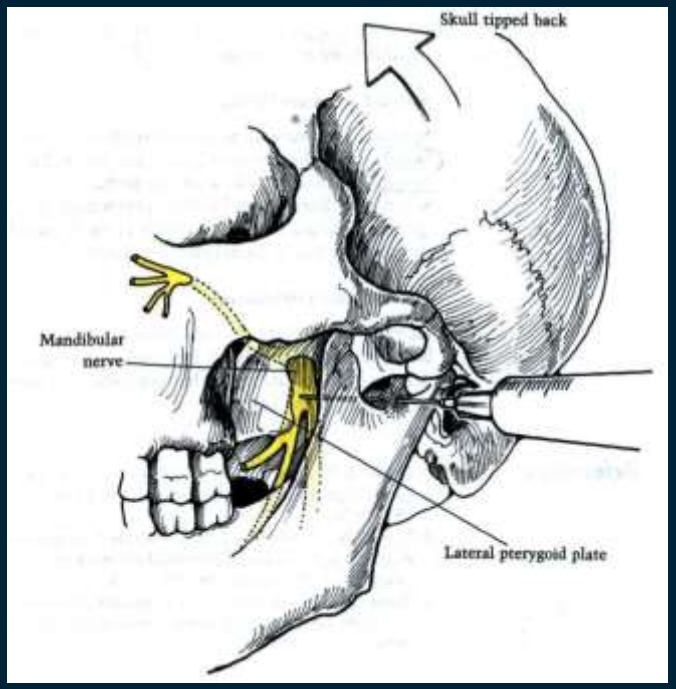
Bupivacaine (marcaine).

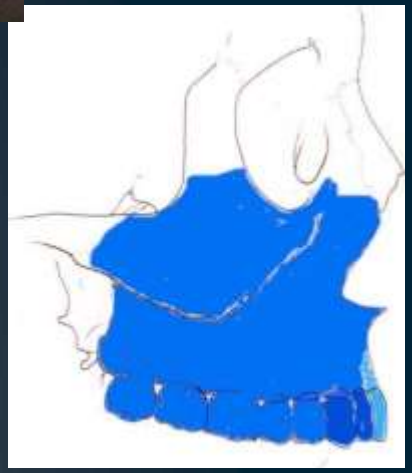
The central anaesthesia’s of maxilla

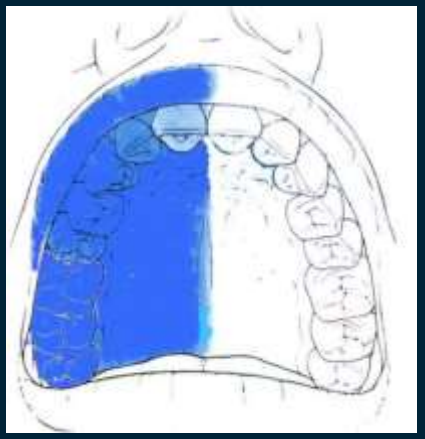




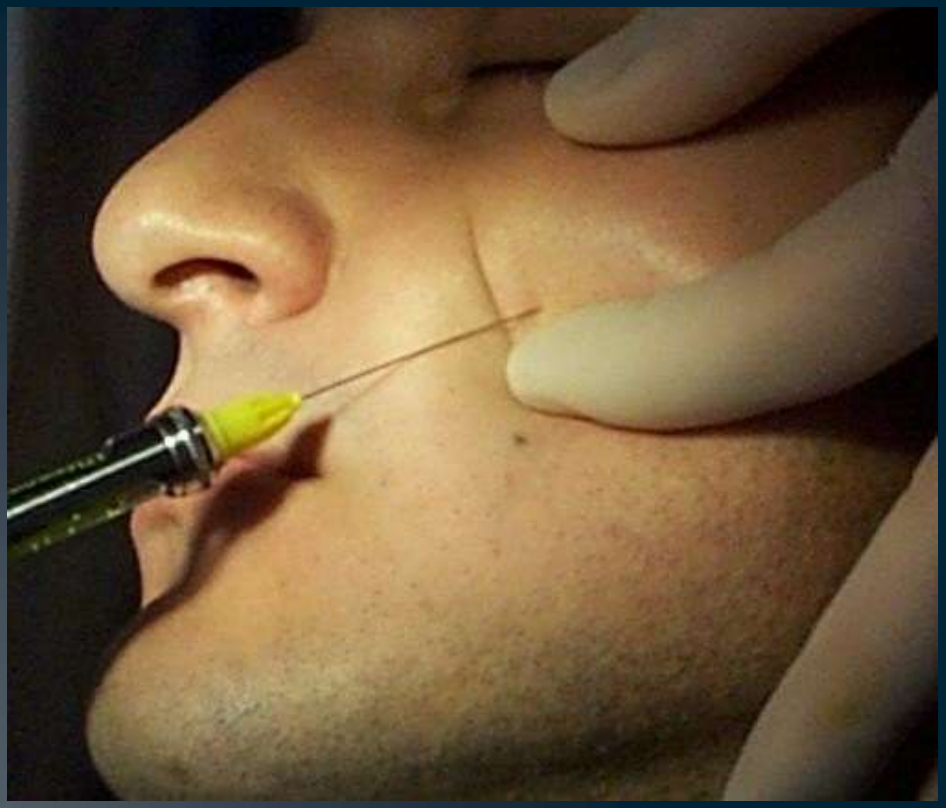
Subzygomatico-pterygoid







Subzygomatic



Orbital

Palatal

The peripheral anaesthesia's Tuberal block

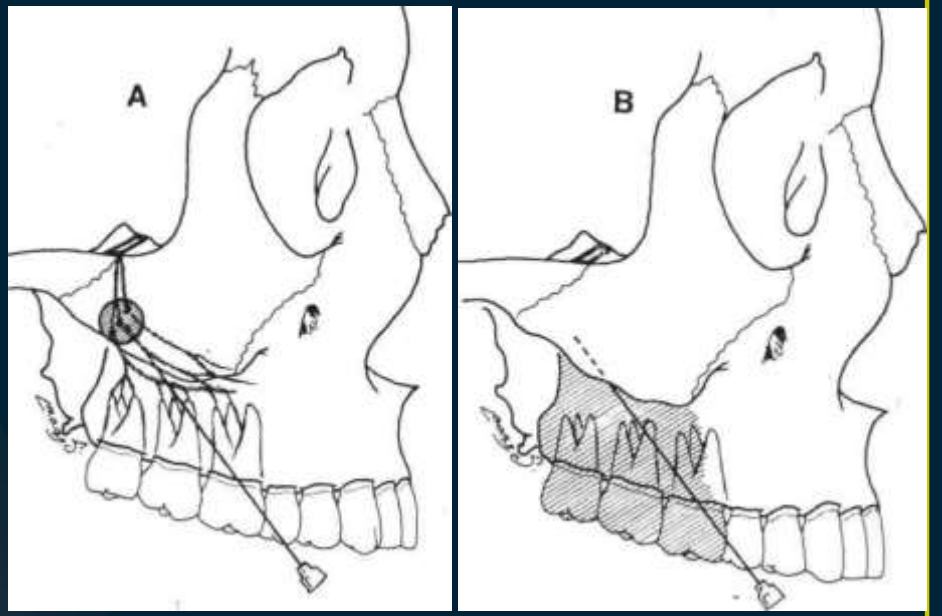
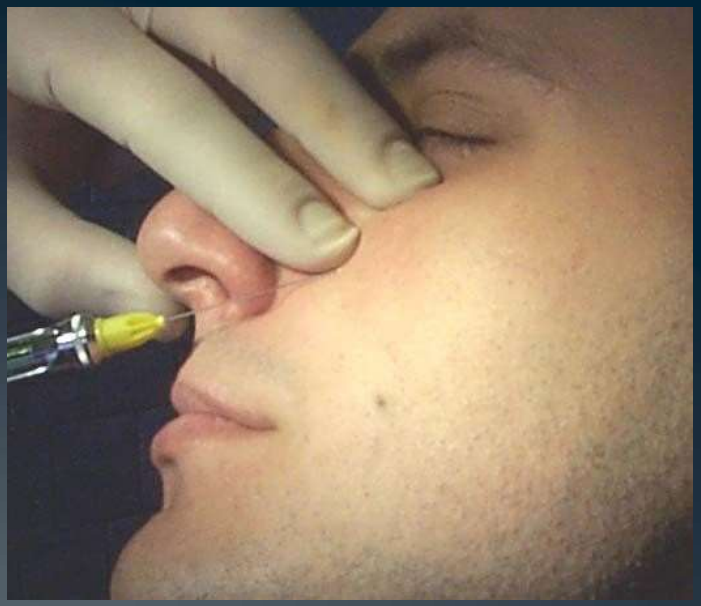
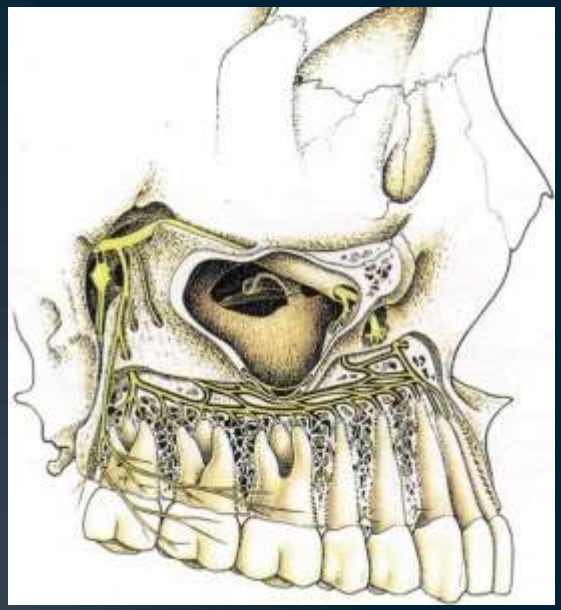
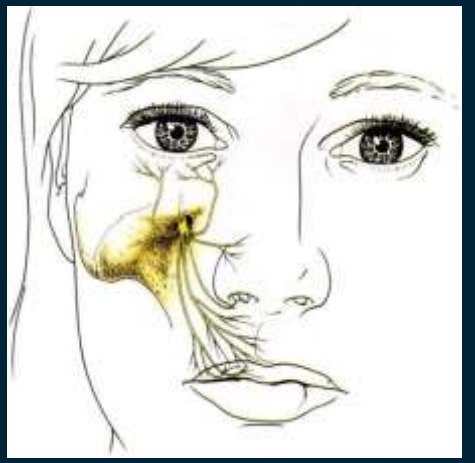


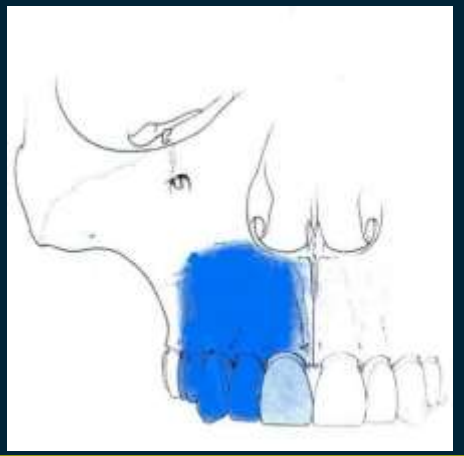
Fig. Site of injection for posterior superior alveolar nerve block (tuberosity injection). The needle is advanced in a direction at a 45° angle to the sagittal plane of the patient. A. Xote that all the upper molars except the mesiobuccal root of the first molar are anaesthetized B.

Anterior and Middle Superior Alveolar Nerve Injection (Infra-Orbital Injection)

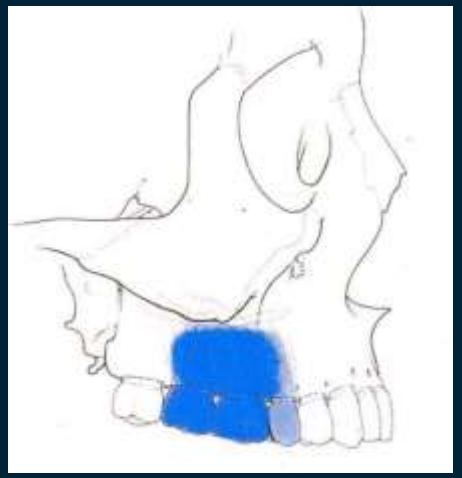




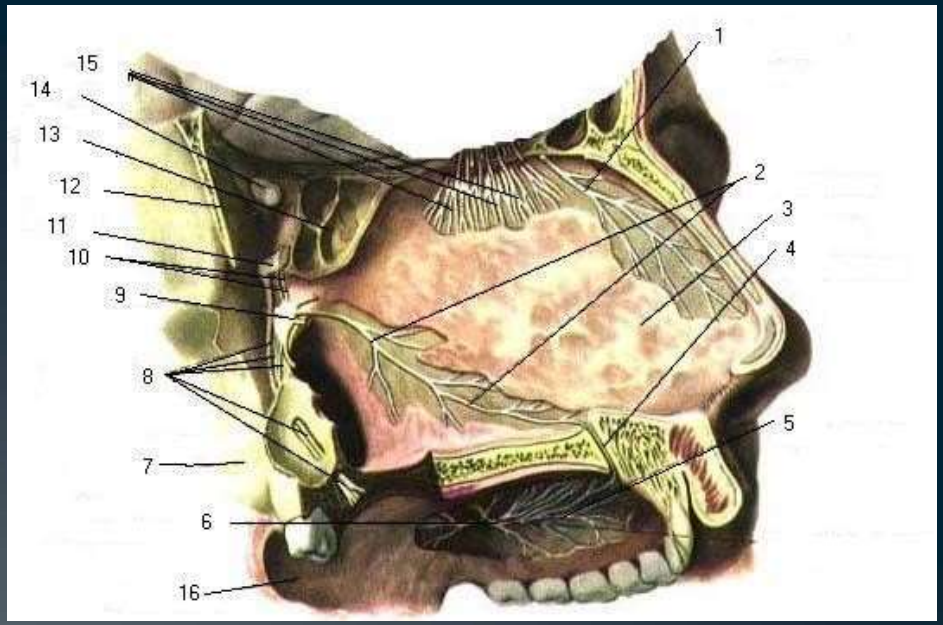


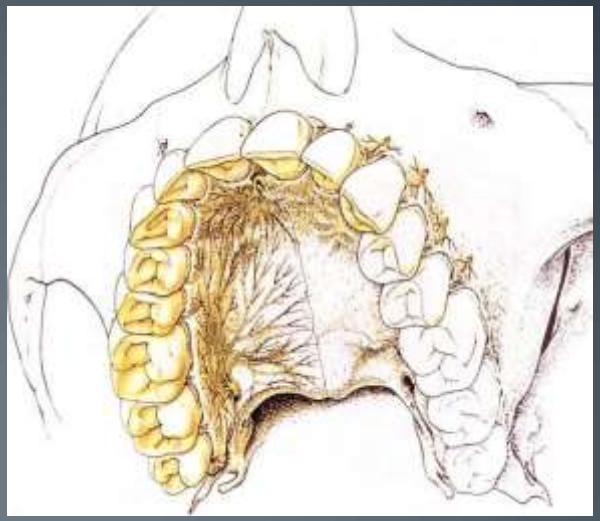


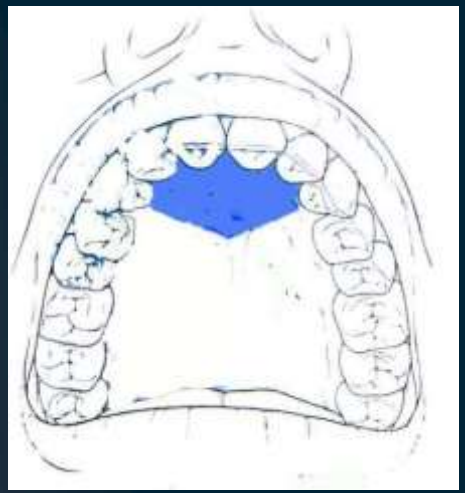
Plexual



Incisival

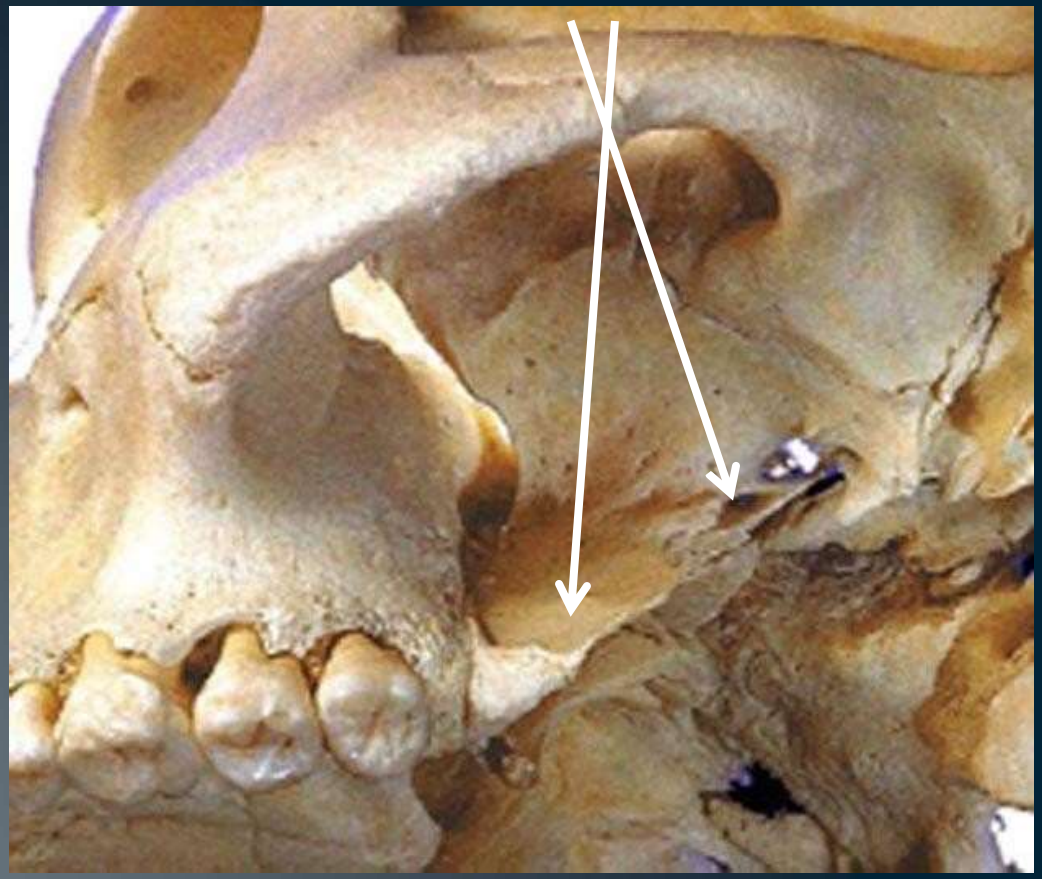




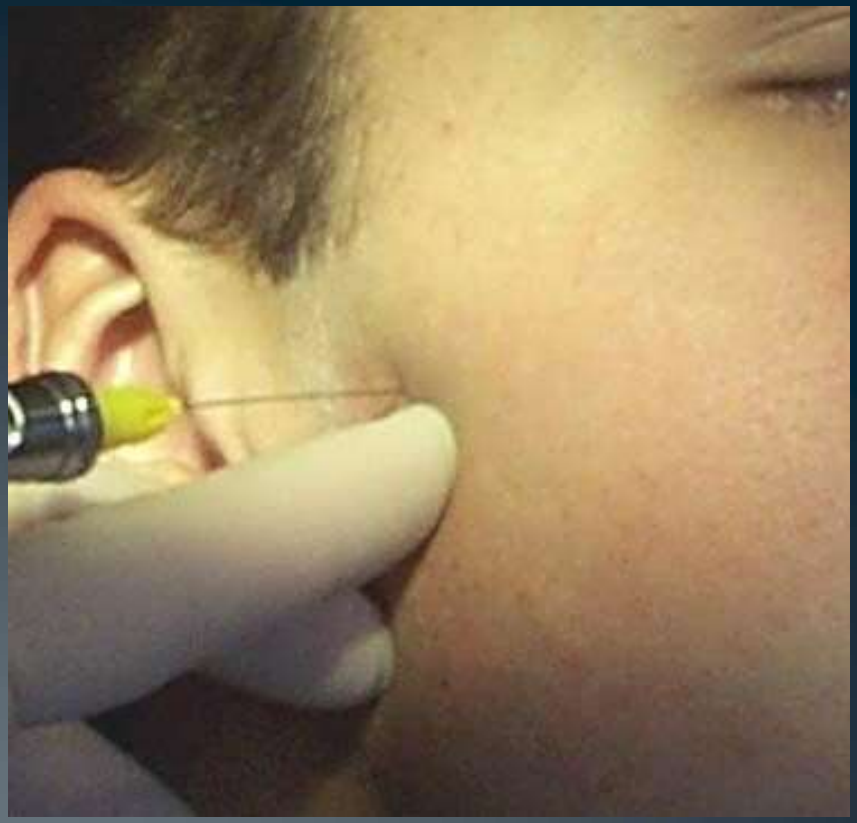


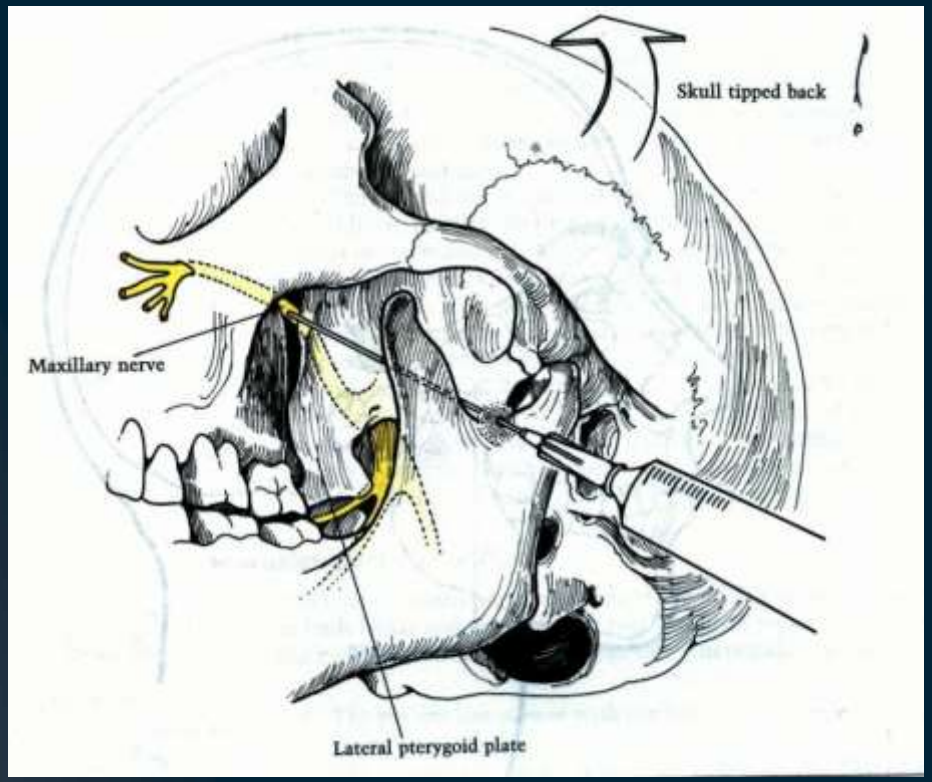
Palatal

The central anaesthesia's of lower jaw (mandibula)



Subzygomatic

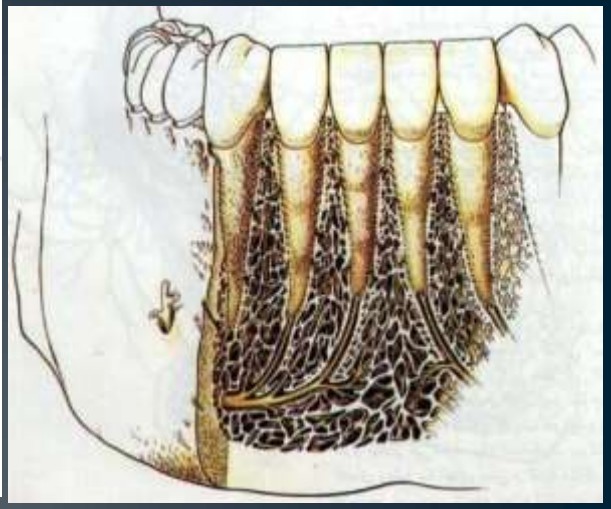




The peripheral anaesthesia's on the lower jaw

Mandibular block

Mental Nerve Block and Incisive Nerve Block (Mental Injection)



Buccal anaesthesia

Torus (syn. eminence, eminentia protuberance)