



Preclinical dentistry III.

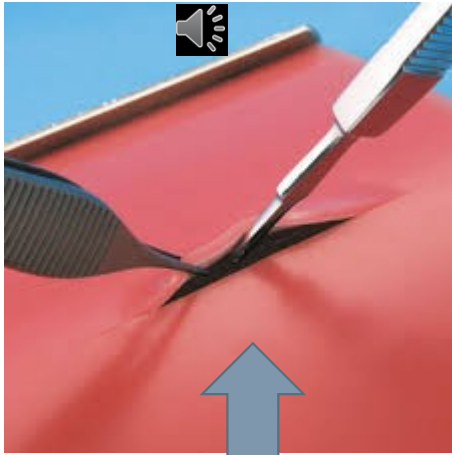
Lectures 1. – 2.

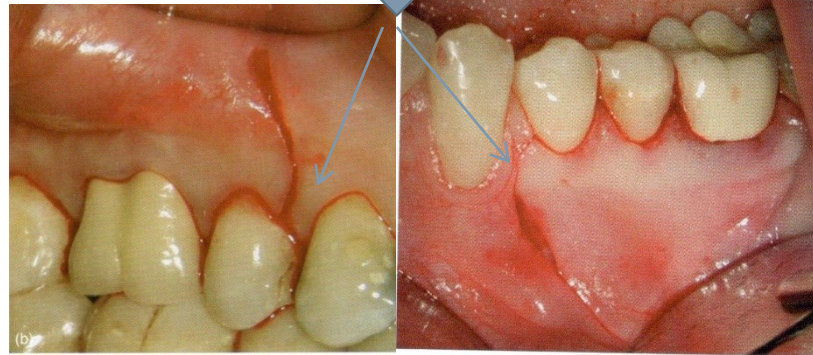
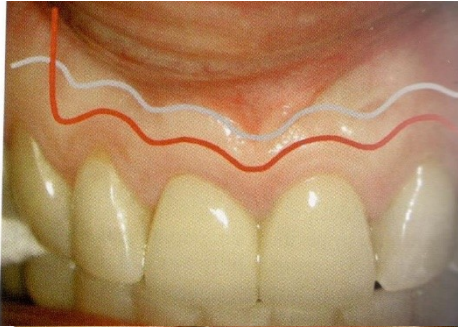


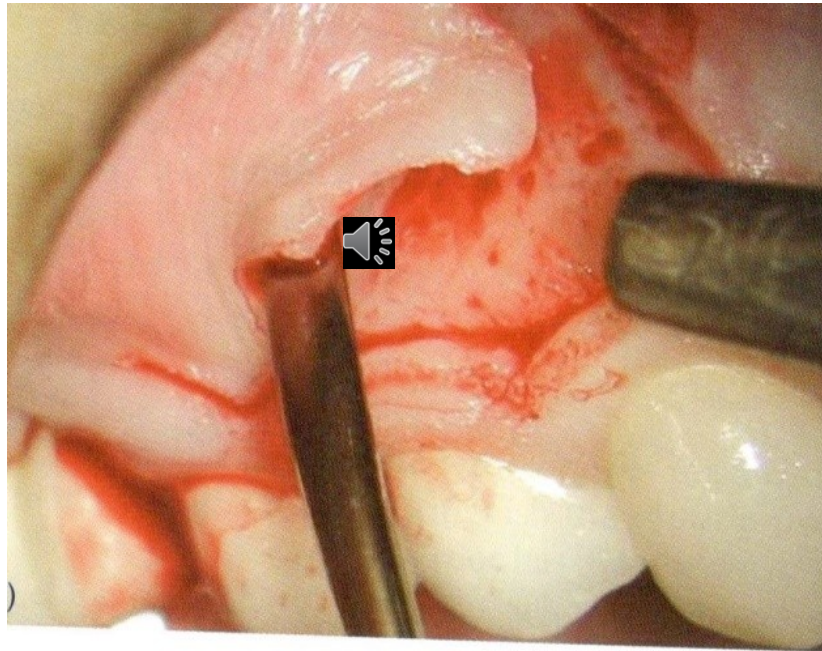
Dental speciality that deals with diagnosis and surgical treatment of diseases, injuries and deformities of teeth and surrounding structures (oral surgery). Maxillofacial surgery is focused also on jaws and face.

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SPECIAL TERMS IN RELATION TO CONTROL OF INFECTION



SPECIAL TERMS IN RELATION TO CONTROL OF INFECTION





Greek

substances

putrefaction

infection



sepsis

antimicrobial

tissue skin



SPECIAL TERMS IN RELATION TO CONTROL OF INFECTION





microorganisms

bacterial spores



sterilisation

antimicrobial agents

antibiotics

antiseptics

tissue

biocides



SPECIAL TERMS IN RELATION TO CONTROL OF INFECTION



fungi bacteria viruses

fungi

bacteria viruses



pressure filtration heat chemicals irradiation high



DRY HEAT STERILISATION



HOT STEAM STERILISATION



COLD STERILISATION



SCRUBBING





Microorganisms on skin

- Transient :- Introduced by soil, dirt, contamination
- Resident:- under finger nails, deeper layers of skin i.e. sweat gland, hair follicles & sweat glands




Scrubbing removes


-most of transient bacteria

-resident bacteria from surface & just beneath skin

Preparation for scrubbing

- Personal Hygiene
- Shower
- Healthy skin on hands, fingers, nails & arms.
- No boil, abrasion or  wound on hands
- Free from cold or URTI

Finger Nails

- Short
- Not over tips of fingers
- Short nails
 - Easy to clean
 - Will not puncture gloves 

Free from nail polish

Chipped nail polish can harbor bacteria


No artificial nails

Jewelry

- Remove all jewelry i.e. rings, watches, bracelets from hands & arms
- Keep them at a safe place or in pocket
- Dead skin & accumulate beneath them



Theatre Attire

- **Scrub Suit**
- **Surgical Cap & face mask**
- **Eye Wear/Wiser**
- **Shoes**
- **Protective wearing** 
- **Plastic apron**
- **Lead apron**

Scrub Suit

- **Street clothes not allowed**
- **Short sleeved cotton scrub suit.**
- **Sleeves 4 inches above elbow**
- **Shirt tucked in trouser**
- **-to avoid shirt tail flapping on sterile field**
- **Trouser legs not touching floor**
 - **to avoid transport of bacteria**

Shoes

- **Street shoes not allowed**
- **Close ended shoes**
- **Chappals or open ended shoes not allowed**
- **Shoe cover for single use only**

Surgical Cap & Face mask

- **Surgical cap cover hair completely**
- **Including pierced ear rings**
- **Face mask cover nose & mouth completely**

FOOD/ DRINK

NO food or drinks in Patient Care
Areas

Food/ Drinks must be consumed in
Staff Lounges



Scrubbing Agents

- **Soap 5 minutes**
- **Povidone iodine solution
2minutes (8ml required)**
- **Chlor-hexidine Solution
(Hibiclens) 2 minutes (8ml
needed)**

Desirable properties of scrubbing agent

- **Non irritating to skin**
- **Leaves minimum bacteria on skin**
- **Prolonged antibacterial effect on skin**
- **Should lather in hot, cold , or hard water**

Scrubbing Procedure

Nail brush for nails

Water Steady flow

Comfortable temperature.

**Hands above the level of the
elbows**

Clothing should remain dry

Movements steady.

Scrub technique

- **Scrubbing do not include rinsing time**
- **Set water temperature**
- **Wet hands & forearms**
- **Hold soap in hands till scrubbing complete**
- **Keep hands elevated above elbow through out**

Scrubbing Procedure

- **Turn off taps with elbows**
- **keep hands elevated.**
- **skin should be blotted dry**
- **Use 2 towels**
- **Towel should be folded**
- **Discard towel immediately**

Gowning Procedure

- **Pick up gown from opened pack**
- **gown is folded with the inside uppermost.**
- **Slide both arms into gown**
- **Not to touch outside the gown.**
- **All gowns must be in a good state**

PARAMETERS OF A STERILE GOWN


- **GOWNS ARE CONSIDERED STERILE FROM WAIST LEVEL TO CHEST LEVEL INCLUDING SLEEVES TO 2' ABOVE ELBOW**
- **STOCKINETTE CUFFS MUST BE COVERED BY STERILE GLOVES**
- **STERILE PERSONS MUST HAVE HANDS IN SIGHT AT ALL TIMES**

Gloving Procedure

- **The Open Method**
- **Closed Method**

- Once gowned and gloved
- stand with hand palms together
- Above the waist
- Away from the gown

At the end of the sterile procedure

- **First remove the gown over the gloved hands**
- **Then the gloves.**
- **Hands should then  be washed and dried.**
- **Gloves disposed of according to policy**



This is the end of the first lecture.



ANAESTHESIA



PAIN



PAIN AND ANAESTHESIA




ANAESTHESIA



PAIN CONTROL - INDICATIONS OF ANAESTHESIA



CLASSIFICATION

- General anaesthesia
 - Analgesia (inhalation, sedation)
 - Hypnosis 
 - Local anaesthesia
-



LOCAL ANAESTHESIA



PAIN CONTROL - INDICATIONS OF ANAESTHESIA

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-
-
-
-



LOCAL ANAESTHESIA CONTRAINDICATIONS



DRUGS

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-
-
-
-
-
-



BENEFITS OF LOCAL ANAESTHESIA



TOPICAL ANAESTHESIA (ON MUCOSA OR SKIN)

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INFILTRATION ANAESTHESIA



INFILTRATION ANAESTHESIA

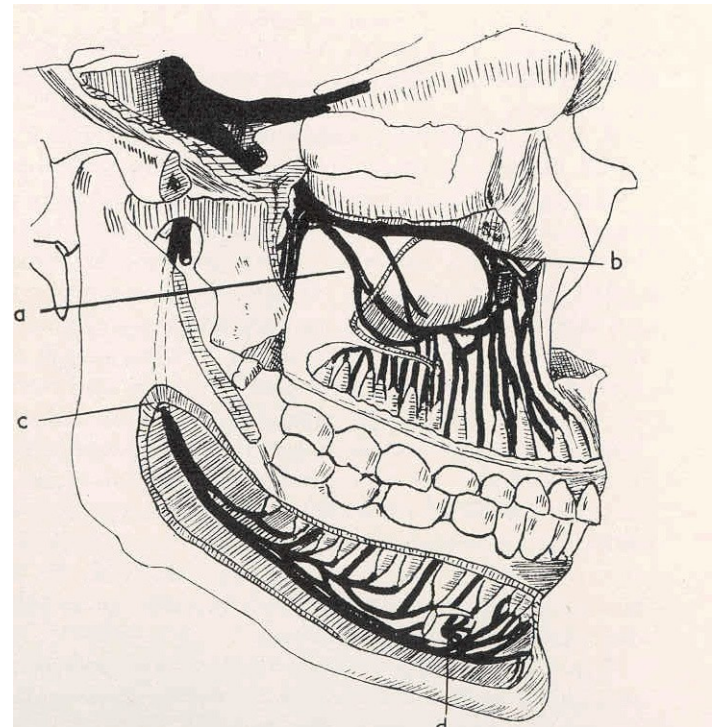


INFILTRATION

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NERVE BLOCK ANAESTHESIA

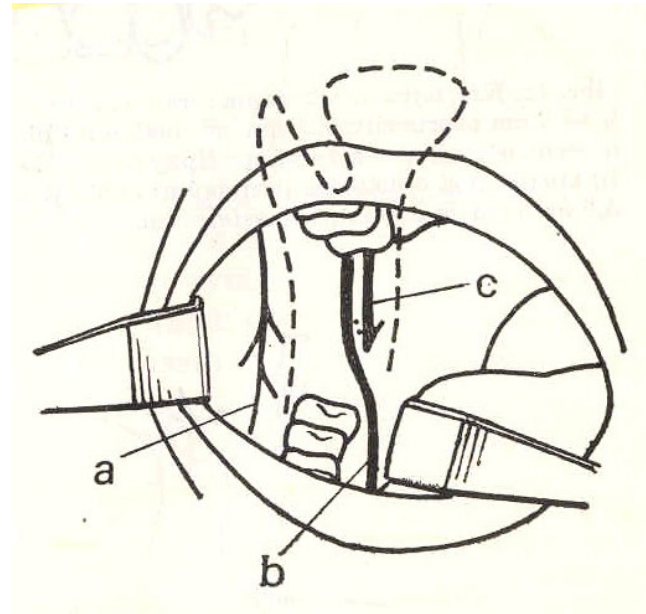


N. alveolaris inferior

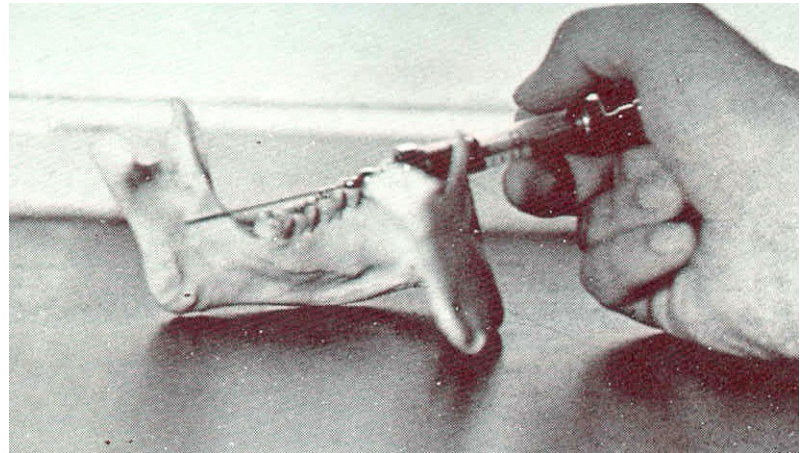
Foramen mandibulare



N. Alveolaris inferior
N. lingualis



NERVE BLOCK ANAESTHESIA

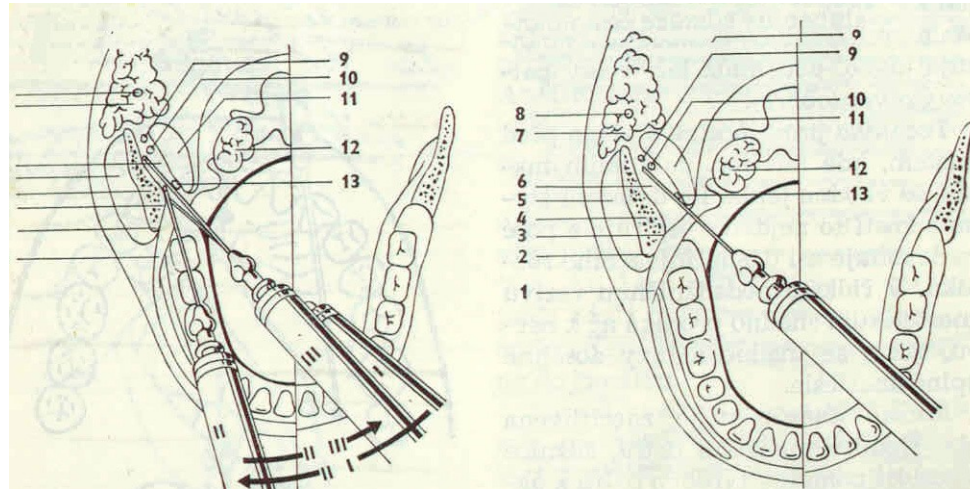


NERVE BLOCK ANAESTHESIA

N. alveolaris inferior

Indirect

Direct



NERVE BLOCK ANAESTHESIA

N. alveolaris inferior

Indirect

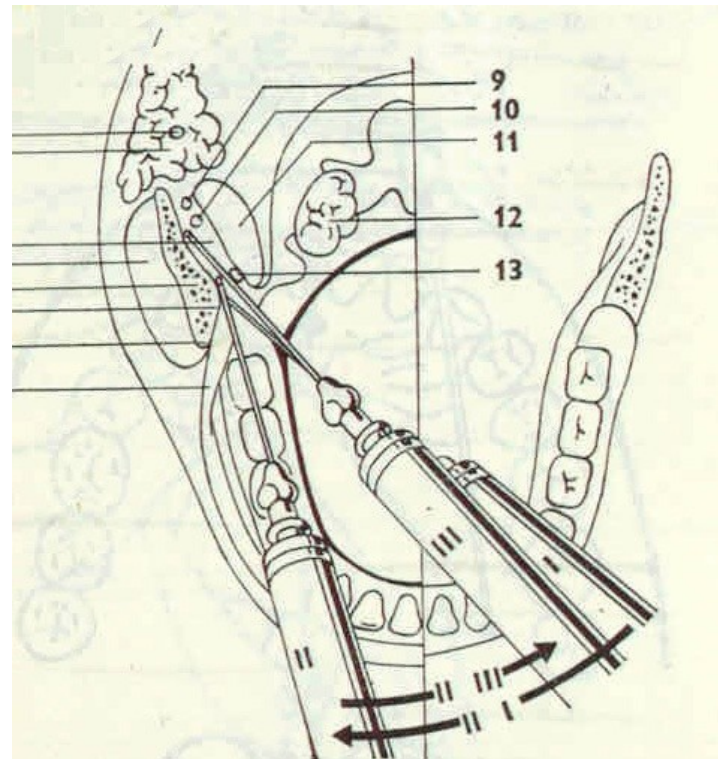
Put the forefinger

on the occlusal surface

Rotate inside (nail inside)

1 cm up occlusal surface

the puncture is situated



NERVE BLOCK ANAESTHESIA

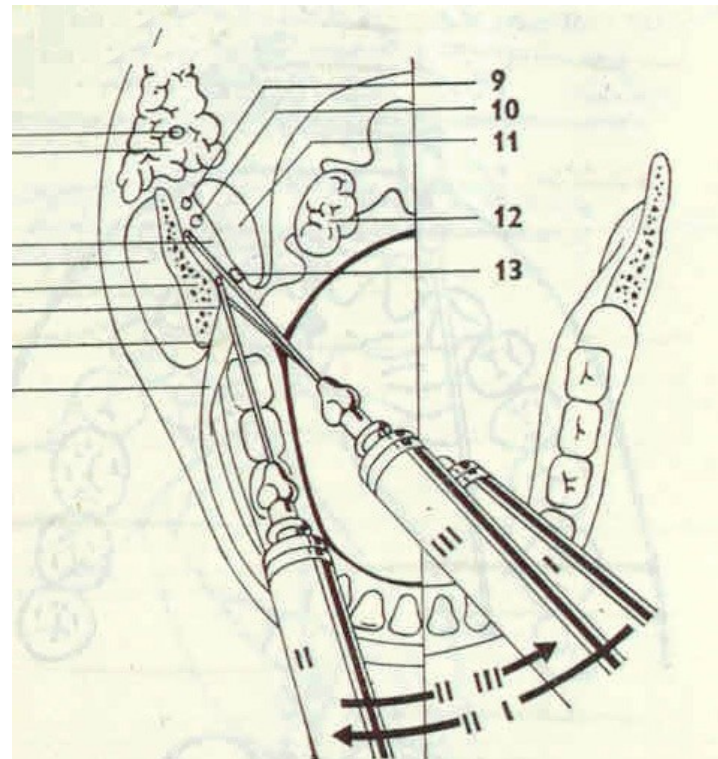
N. alveolaris inferior

Indirect

1. The syringe

on the opposite canine

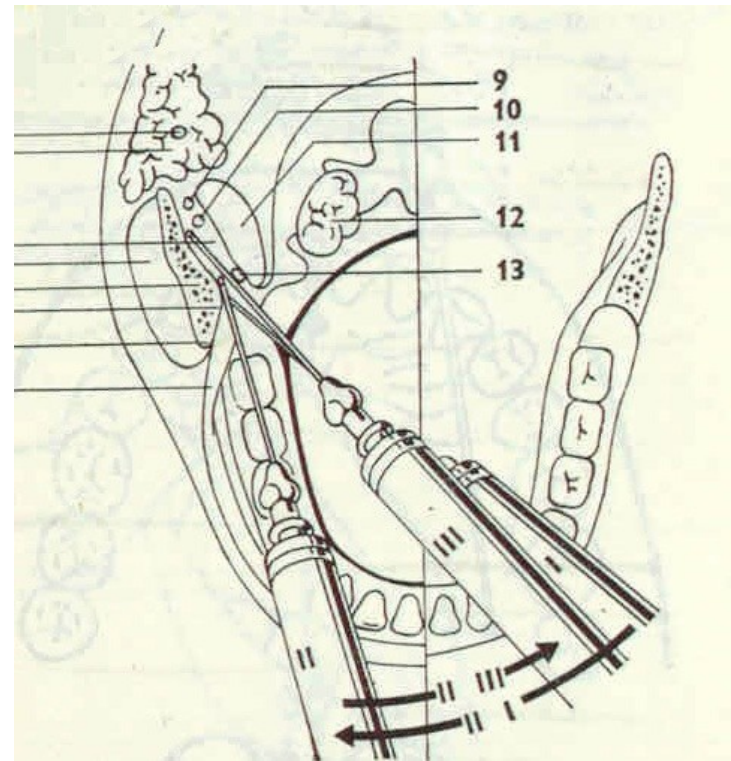
The needle goes behind
the crista temporalis,



Indirect

2. The needle goes deeper
in the contact with the bone

The syringe goes mesial

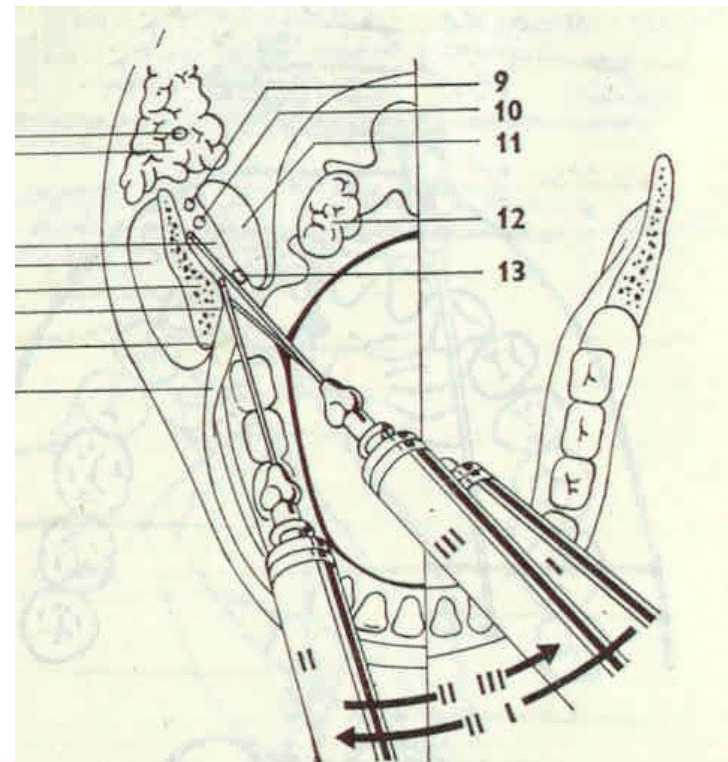


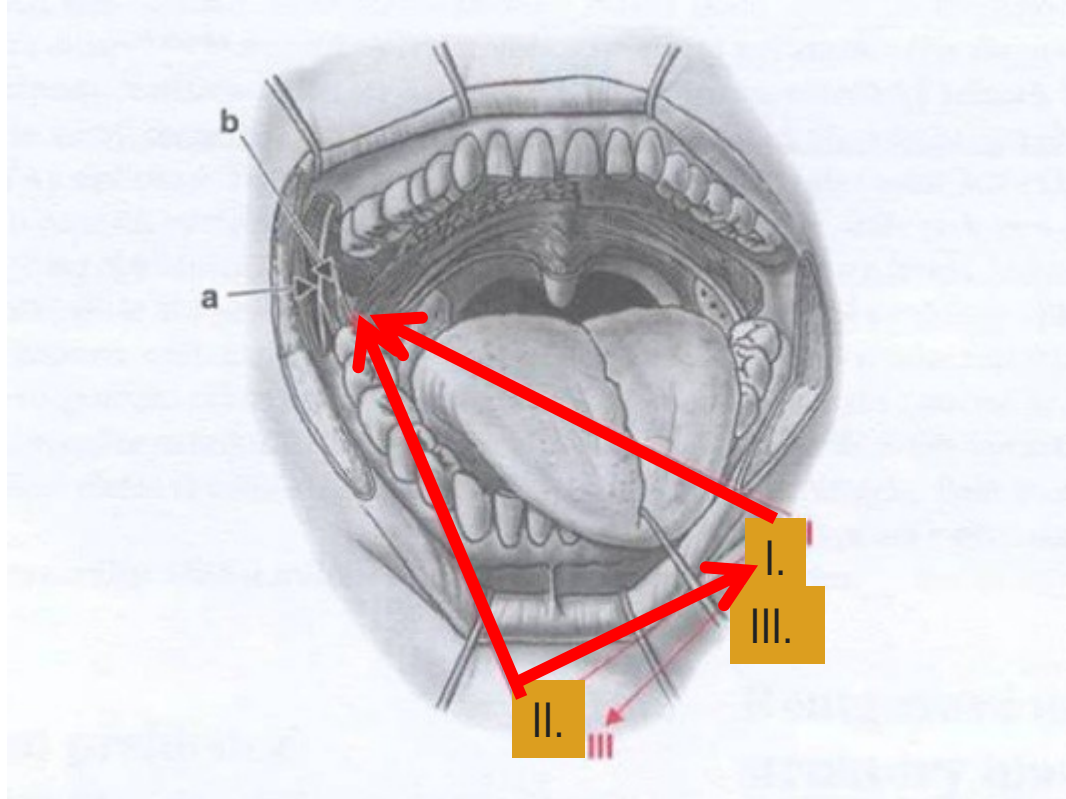
NERVE BLOCK ANAESTHESIA

N. alveolaris inferior

Indirect

3. The contact with bone is lost, the syringe goes back
Aspiration and a injection of the drug.





The beginning is the same

Put the forefinger

on the occlusal surface

Rotate inside (nail inside)

1 cm up occlusal surface

the puncture is situated



NERVE BLOCK ANAESTHESIA

N. alveolaris inferior

Direct

The puncture see previous slide

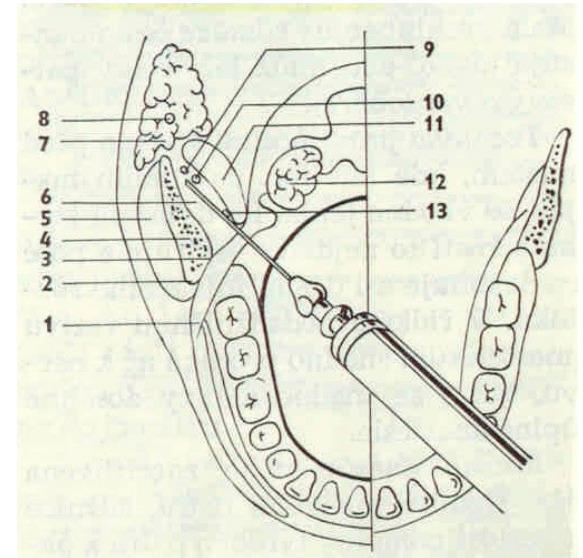
The syringe on opposite premolars

The puncture is situated

medially from crista temporalis

and laterally from plica prerygomandibularis (into a small depression in mucosa)

1,5 cm deep



N. alveolaris inferior

Molars, premolars, mucosa, skin, bone, tongue



NERVE BLOCK ANAESTHESIA

The puncture is situated behind
the distal surface of 2nd premolar
The needle goes between
roots of premolars from up to down,
Forward and mesially

Premolars and canine,
mucosa, skin.



NERVE BLOCK ANAESTHESIA

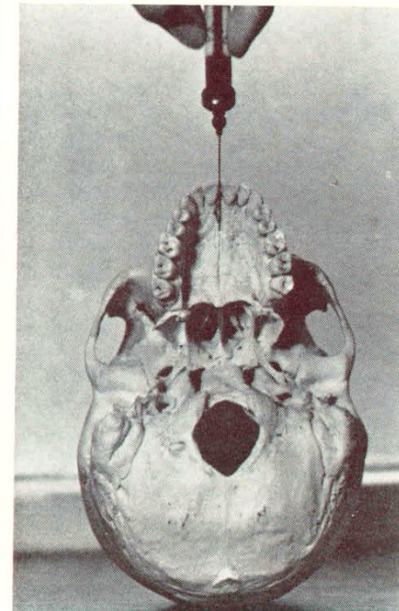
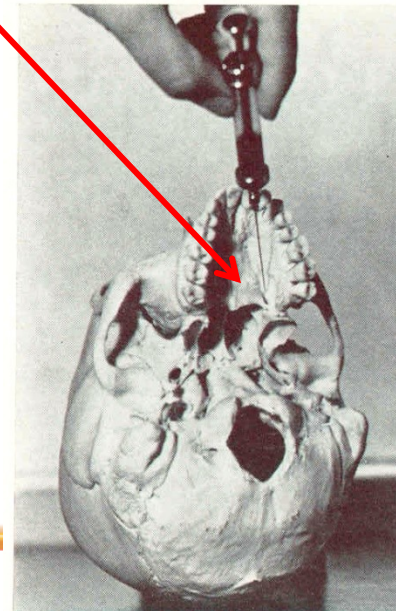
Distal surface of second molar

The puncture is

0,5 – 1 cm before

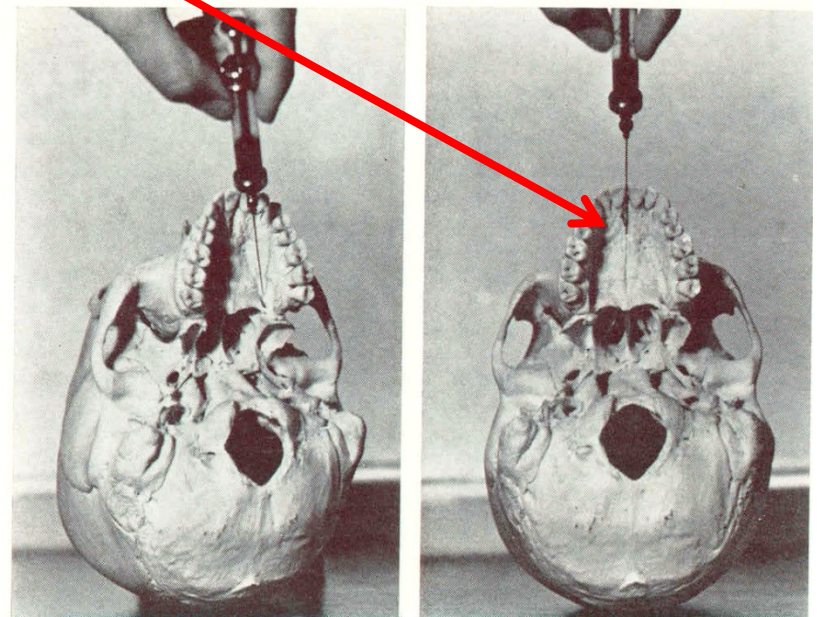
from behind forward

Half of palate



NERVE BLOCK AESTHESIA

Foramen incisivum – n. nasopalatinus



*Triangular area
behind incisors*



ANAESTHESIA ON F. INFRAORBITALE

- Find the margo infraorbitalis
- Raise the lip
- The puncture is situated between canine and 1st premolar
- The needle goes to the region (appr 1 cm below margo infraorbitalis)

Anaesthetic zone: Canine and premolars



ANAESTHESIA ON TUBER MAXILLAE

- The drug is delivered on tuber maxillae
- The puncture is situated behind 2nd molar (distal surface), goes behind and upper around tuber maxillae.

Anaesthetic zone: Upper molars

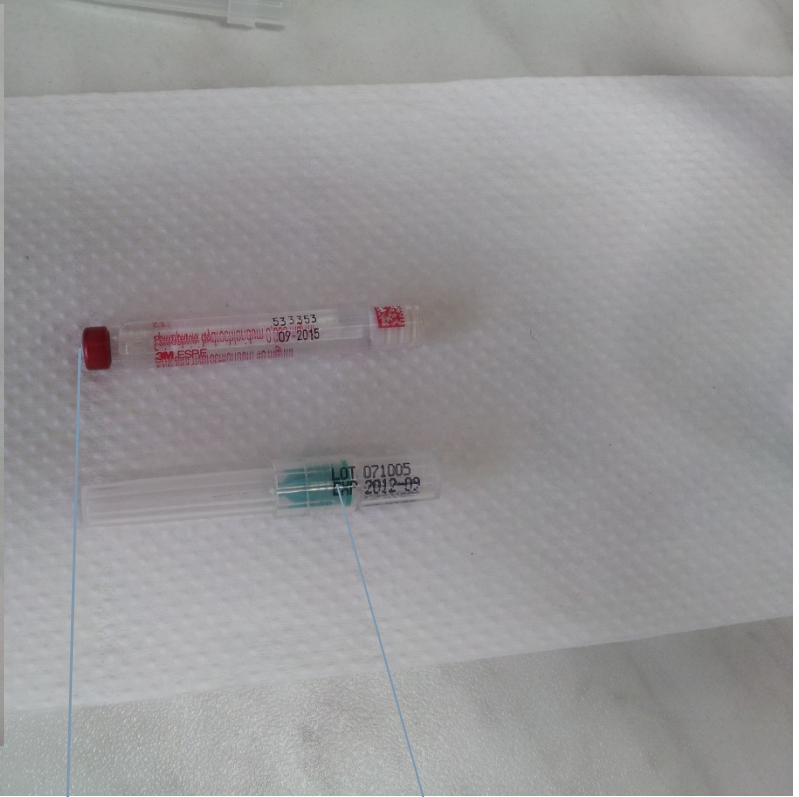


PDL ANAESTHESIA

- Intraligamentary
- Special syringe (pen or gun) The needle is inserted into periodontal space – few drops on anaesthetic
- Indication: single extraction, preparation, pulp exstirpation









The puncture is between gingiva and tooth and goes into gingival sulcus
MB, ML, DB, DL



INTRAPULPAL ANAESTHESIA

- Exstirpation of the pulp – additional step.

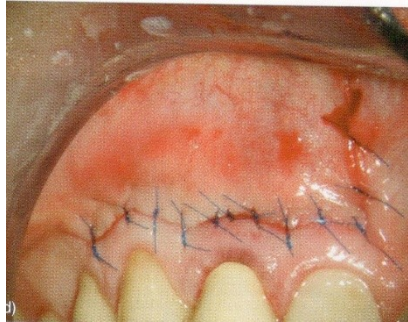
Directly into the pulp chamber



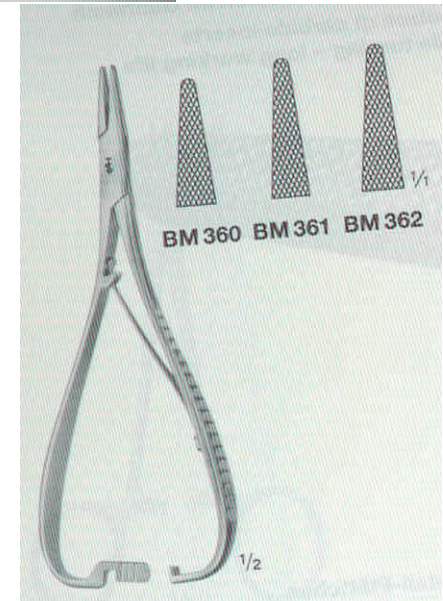
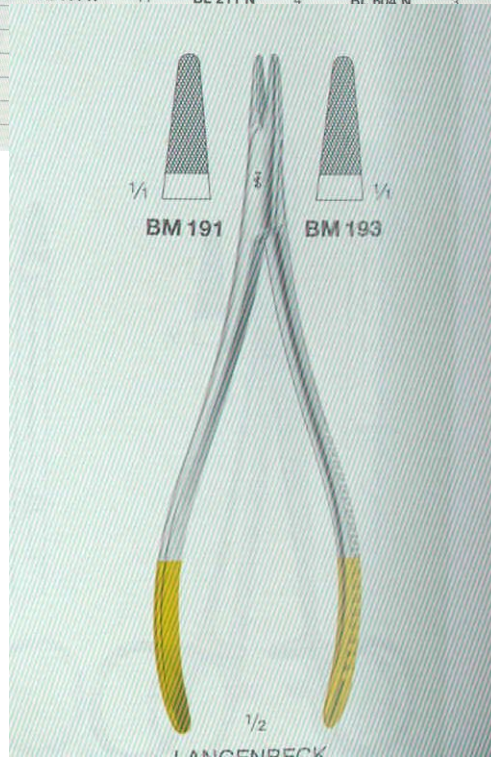
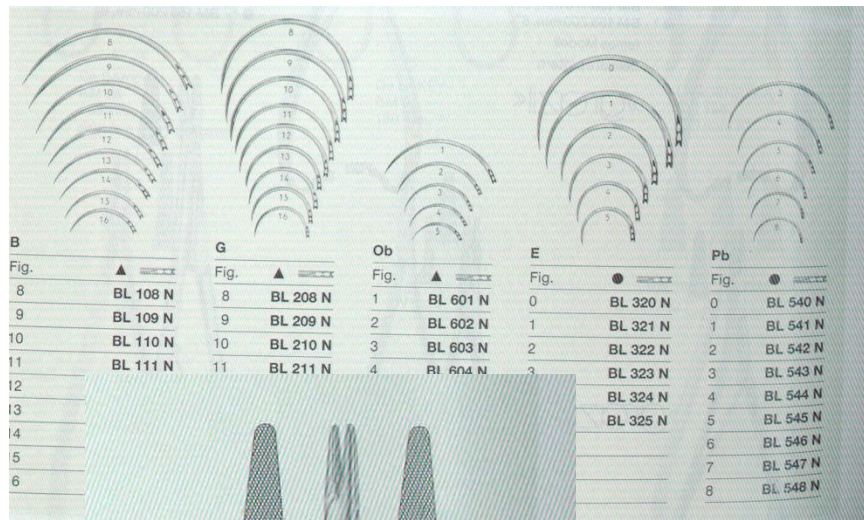
ANAESTHESIA - COMPLICATIONS

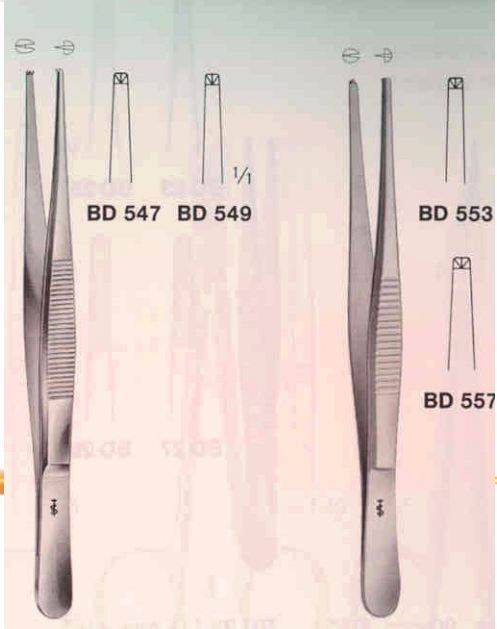
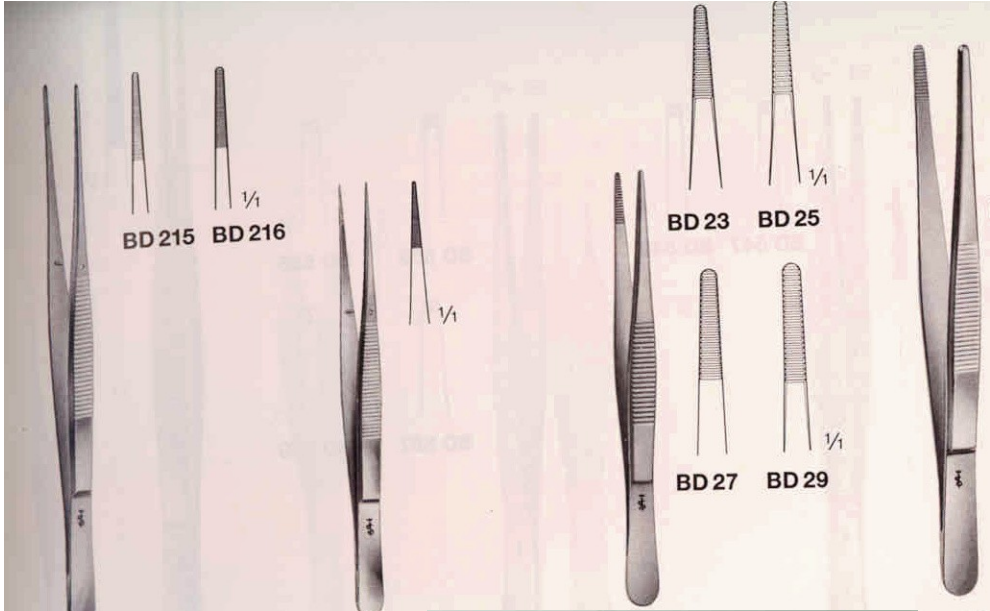
- Bleeding
 - Breakage of needle
 - Haematoma
 - Allergy (swelling, collapse)
 - *Patient's history is necessary!!!!*
-







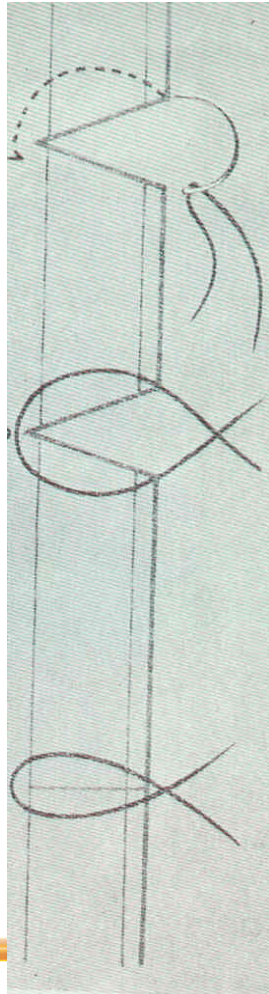




SUTURE



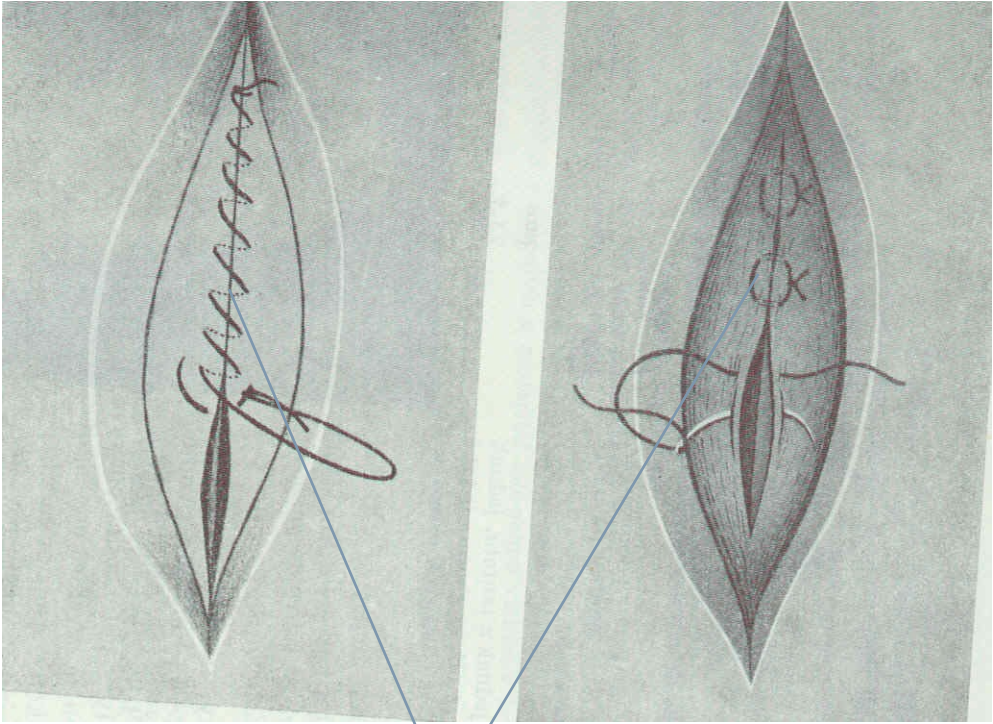
SINGLE SUTURE

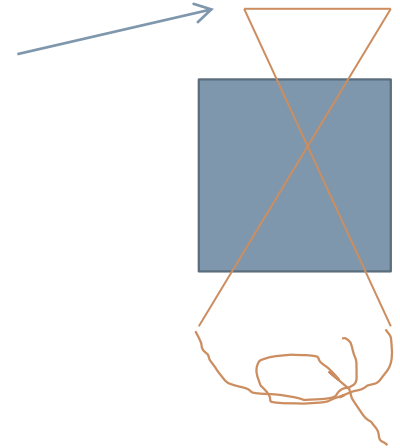
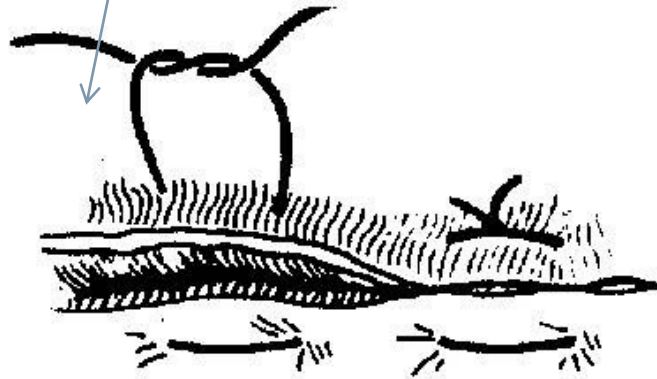
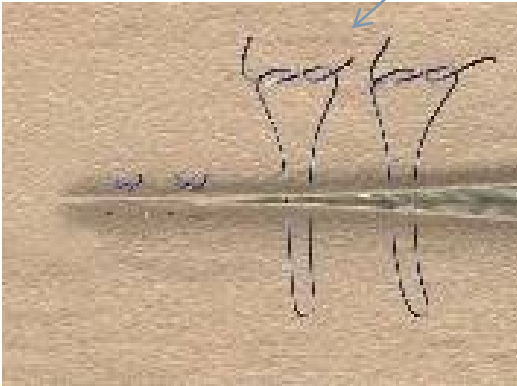
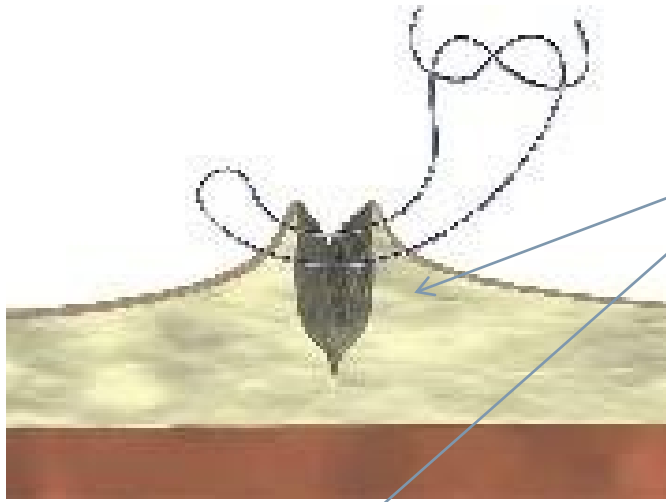


The puncture is situated appr. 2 mm from the border of the wound
The same on the opposite site.

The knot is out of the wound







https://www.youtube.com/playlist?reload=9&list=PLWXXOUqxJ_VP8lxhFP7jJbXVSdXDi0iaC

