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∴ QUESTION: NO: 01 ∴

Q1. ∴ Enumerate the instruments used during extraction process?

A. ∴ EXTRACTION INSTRUMENTS ∴

- * Mouth Mirror.
- * Cotton pliers / forceps.
- * Perio probe.
- * Cotton rolls / (2x2) Gauze pieces.
- * Universal Currette or Surgical Currette.
- * Topical Anesthesia.
- * Anesthesia Syringe or Anesthesia gun.
- * Needles (Short for maxillary and long for mandible).
- * Anesthetic Capsules (Lidocain - Red and polocaine - Tan).
- * Rubber Dam.
- * Clamp and clamp holder.
- * Rubber Dam holder.
- * Rubber Dam hole puncher.
- * Scalpel blades.
- * Tissue forceps.
- * Hemostat.
- * Minnesota (Tongue and Cheek Retractors)
- * Tissue Scissors.
- * Needle Holder / Driver.
- * Suture Needles and Suture Materials.
- * Suture Scissor.
- * Straight elevator (Small & large).
- * Periosteal Elevator.

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- * Root Tip pick.
- * Root Elevator / Cryers.
- * Root Tip Elevators.
- * Bone file
- * Bone chisel.
- * Surgical evacuation tip.
- * Molt Mouth prop.
- * FORCEPS:-
- * Mandible universal forceps / cryer 151.
- * Maxillary universal forcep / cryer 150.
- * Maxillary Right forcep / NO: 88 R.
- * Maxillary left forcep / cryer 150.
- * Universal mandibular forceps / NO: 23
- * Rongeurs forceps.

QUESTION: NO: 02 ::

Q2: Define local anaesthesia. Also write in detail about the six constituents of local-anesthesia?

A. LOCAL ANESTHESIA ::

Local Anesthesia is a technique to provide temporary loss of sensation or pain in a particular area of the mouth, caused by depression of excitation in nerve ending, so the patient will not feel pain during surgical procedures.

P.T.O

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SIX CONSTITUENTS OF LAS ::

- (i) Local Anesthetic Agent (Drug)
- (ii) Vasoconstrictors
- (iii) Fungicide
- (iv) Vehicles
- (v) Preservatives
- (vi) Reducing Agent (Antioxidant)

(i) LOCAL ANESTHETIC AGENT (DRUG) ::

9m Local Anesthetic agent lignocaine hydrochloride 2% and xylocain are used as anesthetic agent and it used for blockage of Nerve Conductors.

(ii) VASOCONSTRICTORS ::

Adrenaline 1:8,000 (epinephrine) is used vasoconstriction in local anesthesia. it increases depth and increases duration of Anesthesia. it decrease blood flow to the site of injection, absorption of local anesthesia by cardiovascular system is solved.

Around the nerve for longer period, thereby increasing the duration of action. Vasoconstriction decreases bleeding at the site of their administration.

it also used for prolongs the actions and reduces the systemic toxicity.

(iii) FUNGICIDE ::

Thymol is used as a fungicides.

P.T.O

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(iv) REDUCING AGENTS :: (Antioxidant):

Sodium Metab_o sulphate

(0.5 mg) is used to prevent the oxidation of vasoconstrictors.

It acts as a preservative for vasoconstrictor agents. Vasoconstrictors are unstable in solution and may be oxidized, especially on exposure to prolonged sunlight.

(v) PRESERVATIVES ::

Stability of modern local anesthesia is maintained by adding Caprylhydrocuprino-toxin which includes xyloxy and Methyl paraben.

Preservatives act as bacteriostatic agents.

(vi) VEHICLES :: (Distilled water Sodium chloride)

It produces the volume and isotonicity of solution and acts as a dilute.

The isotonic vehicle reduces discomfort during injection.

QUESTION : NO : 03 :-

Q3:- Enumerate all extraction complications. Write about the soft tissue injuries in detail?

A. • EXTRACTION COMPLICATION:

The tooth extraction is associated with several general post-

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Several general post Surgical effects Such as:

- (1) Failure of local anesthesia.
- (2) Fracture of Tooth.
- (3) Displacement of Soft Tissues
- (4) Temporomandibular joint (TMJ) Dislocation.
- (5) Nerve Damage.
- (6) Oral antral Communication.
- (7) Dry Socket.
- (8) Injuries of mandible.
- (9) Delayed healing of Medications.
- (10) Maxillary Sinus exposures.
- (11) Haemorrhage.
- (12) post operative bleeding.

SOFT TISSUES INJURY:

- ① EDEMA :: (Swelling) occurs mostly in vascular connective tissues due to continuous injury to the soft tissue during extractions.

Soft tissue injuries commonly occurs in the form of tearing and puncturing the mucosa.

- ② HEMATOMA :: (Collection of blood in a an area)
This often occurs during injection of the local anesthesia without aspiration.

- ③ INJURY TO BUCCAL FAT OF PAD ::
Injury of the buccal fat pad is mostly the result of deep incision performed

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performed during upper third molar Surgery.

④. HAEMORRAGE :: (Continuous bleeding from an area)

Their causes can be local or systemic,
* locally the position of the tooth inclination,
and also the age of the patients,
* Systemic could be bleeding disorders
Such as :

Haemophilia A or B and their other
bleeding Disorders.

⑤. SUBCUTANEOUS EMPHYSEMA ::

(Entrapment of air in a tissues).

They occurs when an air-driven high-
speed turbine is used for tooth
sectioning, air is forced into their
soft tissues through the reflected
flap and invades adjacent tissues.

:: QUESTION : NO : 04 ::

Q4:- Define an impacted tooth. What are
the causes of the tooth impaction?

A. :: IMPACTED TOOTH ::

Impacted tooth is a dental-
disorder in which a tooth failed to erupt
completely or partially to its correct position
in the dental arch. by some its
mechanical or pathological means. and its
eruption potential has been lost.

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The most commonly impacted tooth are the third molar which is also called wisdom tooth.

CAUSES OF IMPACTED TOOTH

The impacted tooth may be caused by the overcrowding of teeth often because the jaw is too small. Teeth also be twisted, tilted or displaced as they try to emerge.

Impacted tooth also caused by hereditary changes and also inflammatory changes in bone due to disease in children like chicken pox etc.

If a tooth is not come out or emerges only partially it is considered to be impacted.

The most commonly impacted wisdom tooth (Third Molars). They usually comes between the 17 and 21 years of ages.

Impacted tooth remain stuck in gum tissues for various reasons:

- * The area may be over crowded.
- * Due to lack of malnutrition.
- * Disease present in a jaw and their surrounding tissues.

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- * Density of Surrounding Bones.
- * Irregularity in positions of the adjacent teeth.
- * Long-standing chronic inflammation causing severe fibrosis.
- * Local causes such as presence of a tumor or development of a cyst (Dentigenous cysts).
- * In local causes occurs ankylosis of tooth and also soft tissues and bony lesions.
- * Systemic causes are endocrinal disorders.
- * Rare causes :-
Rare causes are Osteoporosis, cleft-lips and palates are caused by impacted teeth.

∴ QUESTION : NO : 05 :

Q5:- Write about in detail 3 techniques of Administration of local anaesthesia?

A. TECHNIQUES OF ADMINISTRATION OF LAs :-

- (1) Local infiltration.
- (2) Field block.
- (3) Nerve block.

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(1) LOCAL INFILTRATION :: (0.6 - 1.0 ml).

Local infiltration is a type of injection that anesthetized a small area (one or more teeth & associated teeth) which anesthesia deposited at terminal nerve endings.

Local infiltration is used when anesthesia is required small area. The anesthetic solution is infiltrated to deep dermis where the sensory plexus supplying skin begins to branch.

The amount of solution depends on area that need infiltrated. Extensive local infiltration is not recommended.

(2) FIELD BLOCK ::

In field block, local anesthetic is infiltrated around the border of surgical field, leaving the operating area undisturbed.

Field block may also be considered when operating on ear or lips.

Ex: Gow-gates technique is a kind of field block.

Maxillary injections administered above the apex of the tooth can be termed field block.

(3) NERVE BLOCK :-

Nerve Block is a types of injection that anesthetized a large area. Which anaesthesia deposited near larger nerve trunks. The Supra orbital, Supra trochlear, infraorbital and mental Nerve blocks can provide adequate anaesthesia in procedures on parts of Face.

Nerve Blocks are used for pain Treatment & Management. Often group of Nerves called plexus or ganglion. The injection of this Nerve - ending numbing substances is called Nerve block.

E.g.: IANB, PNB.

∴ IMPACTED TOOTH DIAGRAM:-

