Sheets 5-8, OS 1

Complicated Exodontias

A mucoperiosteal flap : reflect the mucosa, submucosa and periosteum as a one layer because the blood supply in the oral cavity is present in the periosteum and we need to preserve this blood supply and if we didn’t reflect the flap in a proper way this flap will turn necrotic so we have to stick to the principles of flap design

Types :

Enveloped(sulcular incision)- most common , incision going within the cervical margin, doesnot provide adequate access , should extend 1-2 teeth anterior, 1-2 teeth posterior

3 cornered flap(vertical releasing incision anteriorly) greater access

4 cornered flap (vertical releasing incision one anterior –one posterior) substantial access, rarely needed

Semilunar flap – root apex, limited access, avoid trauma to gingival margin

Subginigival flap(as semilunar but with more access ( 2 releasing incisions)

Palatal flaps:

Y incision ( at center of palate 2 anterior limps as releasing incision provide greater access)

Pedicle Flaps ( incision horizontally , keeps vessels contained within the flaps

Indications of complicated exodontias( open extraction)

1-When we start extraction of the tooth using forceps and we feel resistance we must stop and think about surgical extraction.

2- when the x-ray show a very dense bone around the root this indicated surgical extraction

3- short clinical crown with dense bone around the root

4-Hypercementosis of the root is very difficult case makes forceps delivery difficult and it will be expose to sinus .

.\* upper seven shows a widely divergent roots so its indicated surgical extraction

\* divergent roots and close to sinus must do surgical extraction rather than normal extraction . why ? because the bone is very thin so it will be fracture and open sinus to the oral cavity .

5- root caries

Technique of open extraction of a single rooted tooth:

1st option , reseat the extraction forceps under direct visualization to achieve better mechanical advantage

2nd option grasp a little bit of buccal bone under beak of the forcps to allow better luxation

3rd option , use straight elevator to push- expand pdl space of tooth

4th option use a bur to remove bone the irrigation

\* this an example of lower 6 with envelop flap , the reason to make envelope to reduce resistance from buccal side, and we do hemi sectioning to separate the mesial root from distal one by using surgical burs , round burs(to remove bone ) , irrigation with normal saline , fissure burs on bifurcation area , straight elevator ( to do luxation ) to facilitate the extraction by making the tooth as single rooted then we can extract it easily by straight elevator or forceps.

\*When I want to extract upper 6 which has 3 roots (M,D,P) we can do Y section between these roots then we extract crown with palatal root ,mesial and distal roots can easily then extract by straight elevator .

\* extraction of remaining root which is inside bone completely Use RR forceps with slight pressure then take part of buccal plate with the root to achieve access to make it easily to extract and to make it as an application point to straight elevator and forceps then we can trim the bone buccally as wedge by handpiece to enhance entrance for the forceps and elevator .

Conditions of leaving roots

Root fragment 4-5mm in length , not supergicial( deeply embedded in bone, without infection)

Multiple extractions

In maxilla we strart from post then ant as this sequence (7-6-5-4-2-1-3) , we leave canine last one because the root is long and strong.

-If you start extraction and you face difficult tooth to extract you have to leave it last one until the bone will expand around it and then become more luxated and easily to removed .

- Same sequence in lower

If patient come to you from prosthodonics department to construct CD ,first step you have to do alveoloplasty by trim undercut and interseptal area , but in implants case no need to trim

Surgical removal of wisdom teeth

Maxillary&Mandibular around 20% (because it’s the last to erupt)

Etiology:

1. Differential root growth between m and d roots
2. Retarted maturation of 3rd molar
3. The relation of bony arch length to sum of md width of teeth in arch

Clinical Examination:

1. Patient attitude (anxiety, phobia): to know if we would need L.A or L.A plus or even general sedation.
2. Age and general fitness.
3. We need to look for specific signs and symptoms like infections, facial swellings, lymph nodes. Like Pericoronites, if it happens more than 2 times a year for 2 years then this is an indication for the extraction of the 3rd molar.
4. Good access (good mouth opening)
5. We need to check the adjacent teeth (if there is pocketing or carries it may affect the tooth)
6. Check the opposing tooth (if we extracted the lower 3rd molar and the upper was erupted then there will be over eruption this will lead to ulceration on the lower ridge due to mechanical trauma so we may need to extract the opposing tooth if its erupted)

Classification

-According to angulation:

Mesio angular teeth (most common, easiest case) distal half of crown is sectioned  
Disto angular teeth (hardest case), bone removal , CR sectioning  
Horizonatal teeth , bone removal , divide CR from R  
Vertical teeth, bone removal , more access needed

2-Penn&Gregory:

a) MD relation of crown to the ramus

Class 1: M-D diameter of crown is totally anterior to the ant. Border of the ramus

Class 2: Half of the crown is covered by the ramus

Class 3: Completely within the ramus

b) Depth:

Class A: occlusal is level with occlusal plane of 2nd molar

Class B: occlusal surface between occlusal plane and cervical line

Class C: occlusal surface below

CI of removal

Extremes of age,Compromised medical status,Surgical damage to the adjacent structures

We have 2 options (Flaps )

Envelope or traingular flap ---It is safer to use triangular flap

Envelope flap difficult to visualize the area .

\* healing doesnot depend on size of flap

Maximum age of wisdom tooth eruption is 24

How to remove bone : start cutting bone mesial to 3rd molar distally around crown , don’t cut lingually to avoid traumatizing lingual nerve

Postoperative care:

**Fist one** : simple ( paracetamol (content : acetaminophen), Panadol extra ) its consider as a mild analgesic and have some antiviral action so its can be given in simple case .

**Second one** : many many medication that can be given , most important dental analgesic ( Ibuprofen ) can be given as COX inhibitor .

generally speaking of gastric ulcer cant go for ibuprofen. selective COX ( levodoxin , celebrex ) its don’t work on stomach so thisMinimizing the effect the irritation of GI

**Third group** : more stronger , mainly opioid ( morphine , sulfate and derivative ) not OTC drug u have to be careful its may cause. sometime if u have no choice u might need to go to stronger medication to control pain

Antibiotic: Prophylactic differ from therapeutic, can given up to 1 g as we given to infection endocarditis which is more dangerous, if u don’t need to giveprophylactic u can go for preoperative dose 1 and maximum postoperative as we said ((aseptic technique promote clean environment, autoclave instrument make sure every think under control) Bad cross infection for extraction lower 6 with 3mounth pus cause osteoomylitis in the jaw, treat by 3 week hospitalization to control infection

Debridement of wound

Remove bone chips, irrigate with saline, smooth sharp edges , primary closure

By: Suad Shamieh