Complication of exodontia part 2

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- 1) Failure to secure anesthesia.
- 2) Failure to remove the tooth with either forceps or elevator.
- 3) Fracture (#) of:Crowns and roots. Alveolar bone. Maxillary tuberosity. Adjacent or apposing tooth. Mandible.
- 4) Dislocation of the tempro-mandibular joint (T.M.J.):
- 5) Displacement of a root into the soft tissue and the maxillary antrum.
- 6) Excessive bleeding after extraction:
- 7) damage to the surrounding soft tissues.
- 8) post-operative pain:
- 9) post-operative swelling:
- 10) The creation of an oro-antral communication.
- 11) Trismus.
- 12) Syncope (fainting)

6- Excessive bleeding after extraction

At the beginning one must understand that some slight oozing of blood for several hours following tooth extraction is considered normal. But sometime excessive or abnormal bleeding may occur following tooth extraction.

The causes of excessive bleeding may be due to

■ A. Local factors

The local causes which are the commonest causes for prolonged bleeding as in usual, due to:

- 1) gross tissue damage, when there is severe bone injury and tearing of the periosteum many vessels are opened.
- 2) severe gingival lacerations, also damage to large arteries like inferior dental vessel or greater palatine vessels may lead to profuse bleeding.
- 3) the presence of Hemangioma (central) and other vascular abnormalities may lead to such complication.
- 4) post-operative infection of the extraction wound causing erosion of the blood vessel leading to secondary haemorrhage.
- 5) the working in acutely inflamed area may assist in the prolonged bleeding.

B .systemic factors

For the systemic causes like

- 1) systemic haematological disorders like thrombocytopenia, reduction in the clotting factors,
- 2) anticoagulant drugs, hereditary blood disease like haemophilia, all these factors may lead to severe bleeding.
- so good history and clinical examination and blood investigation is very important and essential before any extraction especially if the patient gives you a history of bleeding on previous extractions or trauma.

7-damage to the surrounding soft tissues

A. Damage to the gum or lip.

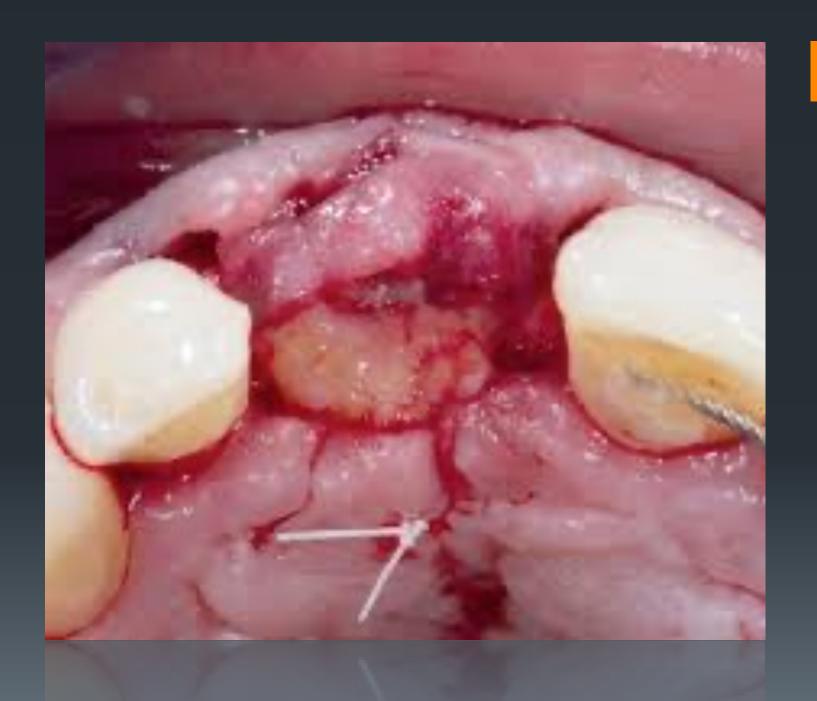
- laceration of the gum during extraction occurs if the gingival tissue not reflected before extraction so gum adhere to the tooth to be extracted from its socket should be carefully dissected before any further attempts to deliver the tooth are made.
- 2) the inclusion of the gum by forceps beaks or by blind application of the forceps may lead to crushing of the soft tissue.
- 3) the lower lip may be pressed or crushed between the handles of the forceps and the lower lip on extraction of upper teeth if sufficient care is not taken.

B. damage to the tongue and floor of the mouth

slipping of elevator during extraction may lead to damage or wounds in the floor of the oral cavity, there are many vital structures in the floor of the oral cavity which might be damage like [sublingual gland, submandibular duct, lingual nerve & tongue). So the operator should always keep in his mind that supporting of elevator during extraction is very important.







C. Damage to nerves

- ♦ Occur mostly on surgical extraction of teeth rather than simple extraction
- ♦ (inferior dental nerve, lingual nerve & mental nerve).
- ❖ Inferior alveolar nerve injury is an uncommon occurrence in extraction of erupted mandibular teeth. In rare cases third molar roots may encircle the nerve so that extraction of the tooth will cause nerve injury also curettage or improper use of elevators to remove root apices may cause tearing or displace bone fragments so that will impinging or pressing the nerve in the canal "inferior dental canal" result in Parasthesia or anesthesia of half of lower lip.
- The mental branch of the alveolar nerve also may be injured during surgical procedures in the premolar region.
- ❖ The lingual nerve may be damaged during exodontias of the lower molar teeth especially the lower wisdom tooth by trapping the lingual soft tissue in the forceps beaks or by direct trauma from misusing of elevator.

8-post-operative pain

Post-operative pain and discomfort after extraction due to traumatized hard tissue may be from bruising of bone during instrumentation or from using burs for removal of bone also damage and rough handling of soft tissue during extraction is another cause for postoperative pain.

The most common cause for the moderate to severe continuous pain after extraction is related to a well-known cause called **dry socket or** <u>acute localized alveolar Osteitis</u>. The patient presented with continuous moderate to severe pain after 24-72 hours after extraction which may last for 7 to 10 days clinically the patient may presented with empty socket (there is no clot in the socket), exposed bone or empty socket with some evidence of broken-down blood clot and food debris within it with intense bad odour. The aetiology of this condition is incompletely understood but many predisposing factors exist like infection, trauma, blood supply, site, smoking, sex, vasoconstrictors or systemic factors.

9-post-operative swelling

After extensive surgical interference and exodontia some time may be associated with post-operative swelling, this swelling may be related to one or more of the following causes:

- A. Oedema.
- B. Infection.
- C. Hematoma.

a. Oedema

Oedema occurs after surgery as a result of tissue injury (it is normal response) when there is great damage to the tissue by using blunt instrument. And rough handling of tissue may Increase the chance of production large Oedema.

So laceration of tissue during extraction, trauma to the bone or periosteum are some of the most common causes of oedema and in other words postoperative swelling, persistent post-extraction swelling or the development of swelling several days after surgery is usually due to infection.

B. Infection

Swelling due to infection can be distinguished from postoperative oedema by the increased skin temperature, greater redness of the overlying tissues, the usual presence of fever and sometime fluctuation is present due to presence of pus. The infection should be always considered a serious complication and need urgent management.

C. Hematoma

Means a collection of blood in the extra-vascular spaces of the tissues. It is rare complication following extraction of the teeth, but sometimes hematoma or ecchymosis may develop postoperatively if haemostasis is not developed and persistent bleeding from either the socket or adjacent alveolar bone.

10-The creation of an oro-antral communication

11-Trismus

Means(((inability to open the mouth.)))

- trismus is one of common complication following extraction of teeth especially the surgical removal of lower wisdom teeth.
- II. Trismus may be caused by post-operative oedema, hematoma, and inflammation of the soft tissue.
- III. may be related to the use of inferior dental block local anesthesia so the management of the trismus depend on diagnosis of the cause of this complication

12-Syncope (fainting)

- Collapse on the dental chair is a common complication during extraction.
- The patient may often complaining of feeling dizzy, weak & nauseated and the skin is seen to be pale ,cold and sweating, these complains may be accompanied by loss of consciousness, and the patient if not noticed at the beginning of the fainting may shows episode of convulsion.
- The primary pathophysiological component of this situation is cerebral ischemia secondary to an inability of the heart to supply the brain with an adequate volume of oxygenated blood.

When the operator notice these signs and symptoms a first aids treatment should be started by lowering the head of the patient by putting him in supine position by lowering the back of the dental chair. Care should be taken to maintain the airway and you have to notice the condition of the patient if consciousness is not returned within 1-2 minutes otherwise one should consider that something serious like respiratory arrest or cardiac arrest may happen and the patient need medical emergency.

Thank you