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

**B .systemic factors**

 For the systemic causes like systemic haematological disorders like thrombocytopenia, reduction in the clotting factors, 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.**

 like 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, also the inclusion of the gum by forceps beaks or by blind application of the forceps may lead to crushing of the soft tissue, also 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**

 Also 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 but one must always be aware of the risk when operating in the region of the (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 or by using surgical extraction to remove impacted wisdom tooth.

**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 acute localized alveolar Osteitis. 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 exodontias 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, and 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.**

 On extraction of upper molar teeth and sometimes upper premolars a communication between the oral cavity and maxillary antrum may be created. This communication if not healed or closed after few days a chronic condition occurs called Oro- antrum fistula.

 Close proximity of the maxillary cheek teeth to the maxillary antrum which are separated only by little amount of bone and sometime even the soft-tissue lining of the maxillary sinus, the presence of periapical infection, the antrum itself may be abnormal in size, misjudgment of force used in extraction or the presence of pathological lesions all these factors may assist in the production of this complication.

 To confirm the presence of this complication the patient is asked to pinch or close the nostrils together and blow air gently into the nose, the operator may see blood bubbling, or shooting of air through the communication is heard or a piece of cotton on tweezer may be defected. The presence of this complication need surgical correction by well-trained oral surgeon and surgical unit in which all instruments and qualified staff present.

**11-Trismus:**

 Means inability to open the mouth, trismus is one of common complication following extraction of teeth especially the surgical removal of teeth especially the surgical removal of lower wisdom teeth. Trismus may be caused by post-operative oedema, hematoma, and inflammation of the soft tissue. Trauma and arthritis of the tempromandibular joint, it 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. In the presence of anxiety blood flow is increasingly directed toward the skeletal muscles at the expense of other organ systems such as the gastrointestinal tract in the absence of muscular movement the increased volume of blood in the skeletal muscle remains there, decreasing venous return to the heart and decreasing the volume of blood available to be pumped by the heart (uphill) to the brain.

 A slight decreased in cerebral blood flow is evidenced by the signs and symptoms of vasodepressor syncope (i.e. light headedness, dizziness, tachycardia, palpitation) if this situation continues cerebral blood flow declines still further and the patient loses consciousness.

 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.