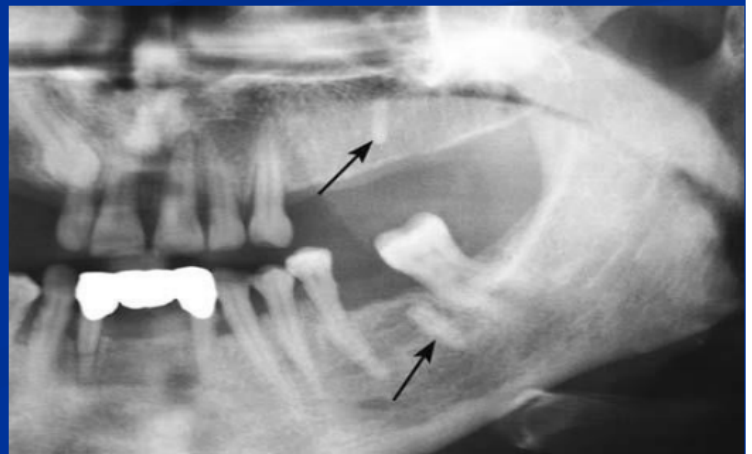
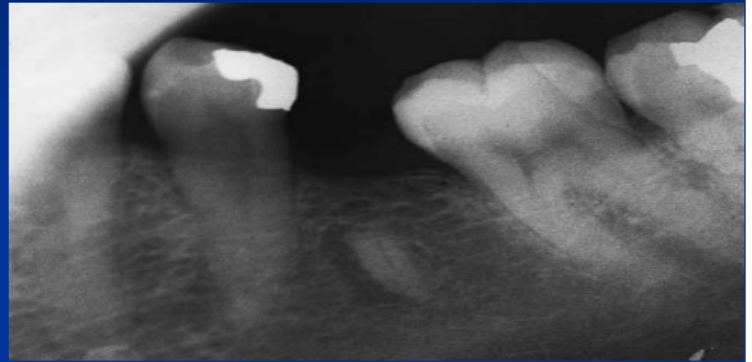


9) Maxillary posterior teeth, whose roots are included in the **maxillary sinus**.

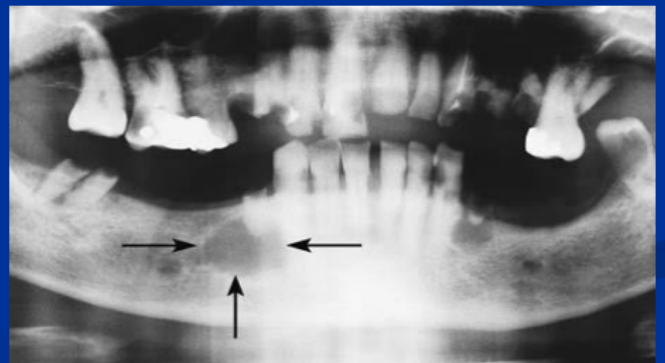
- When the maxillary sinus extends as far as the alveolar ridge, the bone found in the posterior area of the maxilla is also weakened. This increases the risk of fracture of the maxillary **tuberosity** if the extraction involves a firmly anchored tooth (molar), because with the simple technique great forces are generated during its removal.



10) Roots of teeth found **below the gum line**, when their removal is impossible by any other way



11) Roots with **periapical** lesions, whose entire removal through the tooth socket would not be possible with curettage alone.



12) **Deciduous** molars whose roots embrace the crown of the subjacent premolar. If the simple extraction technique were to be attempted, there is a great risk of concurrent luxation of the premolar.



13) Teeth with **supra-eruption**. It is well known that when the antagonist is missing, these teeth present supraeruption to a great degree, which is accompanied by the dragging down of the alveolar process. As such, the extraction must be carried out using the surgical technique with concurrent recontouring of the alveolar process of the area.



Contraindications

- **Asymptomatic fractured root tips**, whose pulp was vital, located deep in the socket.
- The extraction of such root tips should not be considered, especially in older patients, when:

- There is a risk of serious local complications, such as the dislodging of a root tip into the maxillary sinus or injury of the inferior alveolar nerve, mental nerve, or lingual nerve.
- A large part of the alveolar process needs to be removed.
- There are serious health problems present. If a patient with health problems needs to have a surgical extraction, then it must be performed with the cooperation of the treating physician and only if the general status of the patient has improved; the necessary preventive measures must also be taken.

Steps of Surgical Extraction



- **The surgical extraction techniques for single-rooted and multi-rooted teeth are similar, and include the following steps:**

- 1) Creation of a flap.**
- 2) Removal of bone and exposure of an adequate part of the root.**
- 3) Extraction of the tooth or root with elevators or forceps.**
- 4) Postoperative care of wound and suturing.**

- The surgical extraction involves teeth with **intact** crowns, **roots** and root **tips**, and presents certain **characteristics** in each of these cases.