

## Types and Instruments used in Oral Surgery

Coburn Handoko\*

Department of Periodontology, University of Amsterdam, Amsterdam, Netherlands

### DESCRIPTION

Oral surgery is the surgical specialization of dentistry which is involved in the diagnosis and surgical treatment of diseases, injuries and defects. The surgical assistant should have the knowledge and skill in the patient assessment and monitoring, specialized instruments, surgical aseptics, surgical procedures and pain control techniques. The following are the indications of the oral surgery:

- Extraction of decayed teeth that cannot be restored.
- Surgical removal of impacted teeth.
- Extraction of non-vital teeth.
- Removal of teeth for orthodontic treatment.
- Removal of root fragments.
- Treatment of the fractures of the mandible or maxilla.
- Surgery to alter the size and shape of facial bones.
- Surgery of the temporomandibular joint.
- Cleft lip and cleft palate repairs.
- Surgical implant procedures.

### Specialized instruments

Elevator is used to apply leverage against the tooth to loosen from the periodontal ligament and ease in extraction. Periosteal elevator, straight elevator and root tip picks are some of the examples. Surgical curettes are used to clean and scrape the interior of the tooth socket to remove diseased tissue. Ronguers are used to trim the alveolar bone. Bone file is used to smooth the rough margins of the alveolus. Scalpel is a surgical knife used for making precise incisions into soft tissue. Surgical scissors trims the soft tissue and suture scissors are used for cutting the suture material. Mouth prop which is also known as bite-block allows the patient to rest and relax the jaw muscles during surgery.

Chisel may be designed either as single-bevel or bi-bevel. The single-bevel is used for removing the bone whereas bi-bevel is used for splitting the teeth. Mallet is the source of pressure used on the chisel handle. Surgical burs have extra-long shanks and

are used to remove bone or to cut or split the crowns or roots of teeth.

### Types of oral surgeries

Some of the common oral surgeries include dental implant installation, tooth extractions, bone grafting, corrective jaw surgery, etc.

**Dental implant installation:** It is a common method of insertion of implants for replacing the missing teeth. The implant is a rod or screw that is placed into the patient's jaw during surgery. The majority of implants are made of titanium; however they can sometimes occasionally be made of zirconium or other materials. Depending on the implant type utilized and the condition of the patient's jaw, a crown may be affixed to the implant after it has been inserted. Others might have to wait up to six months for the implant and the surrounding bone tissue to fuse.

**Tooth extraction:** At times, a patient needs a tooth extracted and a simple extraction is insufficient. In such cases, a surgical extraction is carried out. In order to access the tooth and extract it, the oral surgeon makes an incision at the patient gums. Both local and general anaesthesia are acceptable for performing it. Severe tooth decay, injury or infections are common causes for tooth extraction.

**Bone grafting:** This surgical operation is carried out when a person's jaw bone tissue is insufficient. Failure to repair a missing tooth or a dental disease that weakens jawbone tissue might cause this. When a patient needs implants but lacks the bone tissue, bone grafting is performed in order to hold the oral prosthetic in place.

**Corrective jaw surgery:** This procedure, also known as orthognathic surgery, is used to correct a wide range of minor and significant dental and skeletal defects, such as a misaligned jaw. The surgery can significantly enhance the patient's capacity for normal breathing, speaking, and chewing.

**Correspondence to:** Coburn Handoko, Department of Periodontology, University of Amsterdam, Amsterdam, Netherlands, E-mail: handoko.co@26pu.edu.nl

**Received:** 29-Nov-2022, Manuscript No. AEDJ-22-20924; **Editor assigned:** 01-Dec-2022, PreQC No. AEDJ-22-20924 (PQ); **Reviewed:** 15-Dec-2022, QC No. AEDJ-22-20924; **Revised:** 22-Dec-2022, Manuscript No. AEDJ-22-20924 (R); **Published:** 30-Dec-2022, DOI: 10.35248/0976-156X.22.14.239.

**Citation:** Handoko C (2022) Types and Instruments used in Oral Surgery. Ann Essence Dent.14: 239.

**Copyright:** © 2022 Handoko C. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.