

PROSTHESIS

COMPLETE DENTURE



Lec. 1 Introduction

DR. Zeena Farhan

Terminology

Dentulous(dentate): Complete set of natural teeth are present in the mouth.

Edentulous (complete Edentulism): Condition in which the mouth is without teeth.

Partially edentulous: Condition in which some of natural teeth are lost.

Denture: An artificial substitute for missing natural teeth and adjacent tissues.

Retention: Resistance of the denture to vertical dislodging or displacement force away from the ridge (the supporting tissue)

Stability: Resistance of denture to horizontal direction (lateral and antero-posterior force)

Support: Resistance to vertical lodging force toward the ridge (rigid support from ridge and palate)

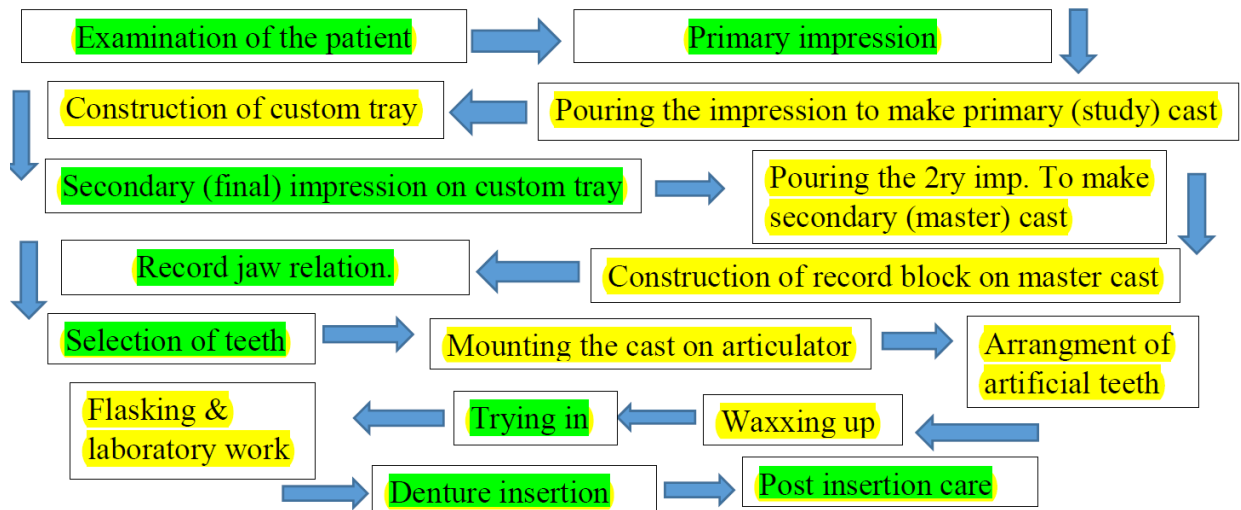
Complete Denture prosthetics

- ✓ Involve the replacement of the lost natural dentition and associated structure of the maxilla and mandible for patient who have lost all their remaining natural teeth.
- ✓ It involves several steps some of which are clinically performed in the clinic in the presence of the patient, the other steps are laboratory and hence done in the laboratory in the absence of the patient.
- ✓ Every clinical procedure is preceded and followed by laboratory procedure except patient examination and primary impression.

Denture fabrication steps

Green: clinical step

Yellow: laboratory step



Complete denture consists of: -

A) Denture base: which is part of denture that rest on supporting structure and to which are attached.

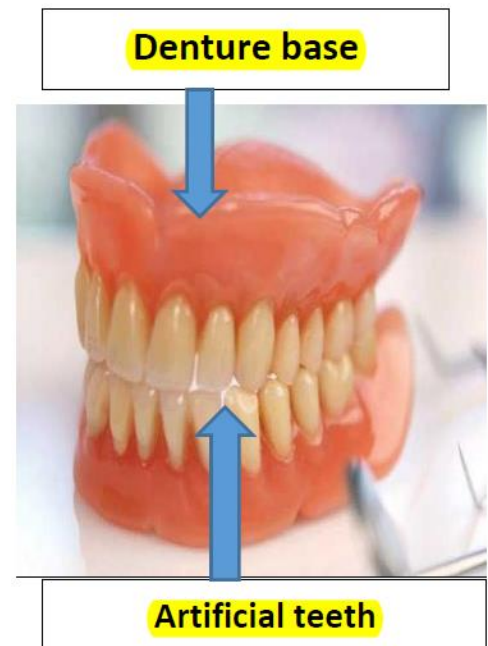
✓ **Function:** -

- 1) To provide retention and stability of the denture.
- 2) To carry and support teeth.
- 3) To represent the gums.
- 4) To assist the teeth in supporting the cheeks and lips.

B) Artificial teeth: which attached to the base.

✓ **Function:** -

- 1) To assist in preparing food for deglutition.
- 2) To provide a pleasing and natural appearance



➤ **Denture surfaces:**

Fitting surface (basal) (impression surf.):	Is the denture surface that is determined by the impression (faced the supporting tissue)
Polished surface:	Surface that starts from the border of the denture and include the facial, lingual and palatal surface.
Occlusal surface:	Surface which makes contact with the opposite surface.

➤ **Denture border:** The margin of the denture base between fitting and polished surface.

➤ **Denture flange:** Is vertical extension of the denture base that extend from the cervices of the teeth to the border of the denture flange they are named according to location:

Labial flange:	The portion of flange that occupies the labial vestibule.
Buccal flange:	The portion of the flange that occupies the buccal vestibule.
Lingual flange:	The portion of the flange of the mandibular denture that occupies the alveololingual sulcus.

Objective of complete denture: -

1-Teeth are necessary for good digestion and optimal health. chewing of food and mixing it with saliva is also the first step in digestion.

2-Restoration of facial contour and appearance

- Loss of teeth result in a prematurely aged appearance due to loss of support and falling in of the lips and cheeks.
- A properly constructed denture will correct and restore the patient`s normal appearance.
- In addition to soft tissue change, loss of natural teeth lead to respiration of the alveolar bone and improper placement of artificial teeth will result in improper support of the lips and an unnatural esthetic result.



3- Correction of speech defeat

- Effective speech requires teeth.
- The tongue contacting or calving against the teeth form many sounds.
- Proper placement of artificial anterior and posterior teeth is necessary to restore good speech
- Improper positioning of the anterior teeth inhibits the tongue and lip from producing good sounds.

4- Preservation of the remaining tissue

- The alveolar process that developed with the teeth disappear after loss of teeth resulting in reduced alveolar ridge
- Restoration of the chewing function through denture minimize the rate of alveolar atrophy.
- Restoration of normal dimension of the denture space help to preserve the joint and stop the development of abnormal chewing habit.

5- Patient satisfaction and comfort

- An uncomfortable patient is unhappy.
- It must be recognized that a patient has to accept the dental prosthesis psychologically in order to be comfortable.

NOTS:

- Prosthesis: - An artificial replacement of an absent part of human body.
- Prosthetics: The art and science of supplying artificial replacement for missing part of the human body.

- Prosthodontics (dental prosthetics) : The branch of dentistry that deal with the replacement of missing dental and oral and craniofacial structure.
- Prosthodontist: A specialist in prosthodontics.
- Denture: An artificial substitute for missing natural teeth and adjacent tissues.
- Complete Denture: A removable dental prosthesis that can be removed and replaced from the mouth.
- Fixed partial denture: A partial denture that is cemented to natural tooth or tooth root or implant.
- Immediate denture: A complete denture or removable partial denture fabricates for replacement immediately following the removable of natural teeth.
- Single complete denture: Single denture is complete denture that occlude against some or all of natural teeth, fixed restoration, complete denture.
- Over denture: A removable partial or complete denture that cover and rest on one or more remaining natural teeth, roots, dental implant.
- Implant prosthesis: Any prosthesis (fixed or removable) that utilize dental implant in part or whole for retention, support and stability.
- Dental implant: A prosthetic device of all plastic material implanted into the oral tissue beneath the mucosal and/or periosteal layer within bone to provide retention and support for a fixed or removable prosthesis.
- Obturator: A prosthesis used to close a congenital or acquired tissue opening.

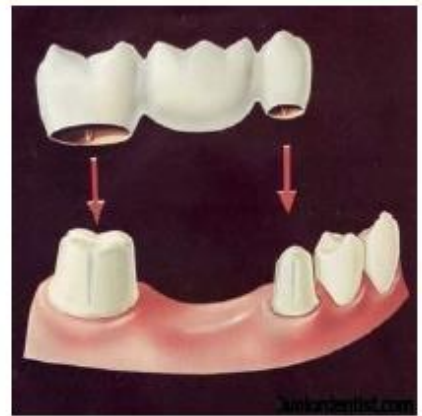
Natural teeth	Artificial teeth
Firmly rooted in the bone so they can incise, tear and finely grind Food because the lower teeth can move across the upper teeth.	Rest on gum and held by weak force and subjected to powerful displacing force so their efficiency is limited.
Good Esthetic, can have some abnormalities (crowding, hypoplasia)	Can be indistinguishable from natural teeth (not good as natural)
Normal speech	The speech of artificial denture wearer will be normal once the tongue and lip adapted to the denture.



Complete removable denture



Partial removable denture



Fixed partial denture



Single denture



Over-denture



Over-denture



Implant over-denture