### **Second Stage**

## 4. lecture



# **DENTAL IMPRESSION TRAYS**

م.د. نسرين مهدي صالح الفهداوي جامعة المعارف/ كلية طب الأسنان

**Dental Impression**: It is an negative likeness or replica of the teeth and /or edentulous area and adjacent tissue.

**Complete dental impression:** It is a negative registration of the entire denture bearing, stabilizing and seal area of either the maxilla or the mandible.

In complete denture prosthesis, we make two impressions for patient:

- a) Primary impression.
- b) Final or secondary impression.

To make an impression we should have impression tray.



#### **Impression tray:**

A device that is used to carry, confine, and control impression material while making an impression.

Impression tray consists of two main parts:

- 1. Body.
- 2. Handle.

#### **Types of trays**

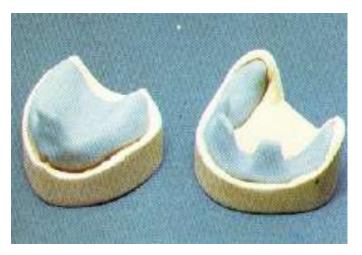
There are two main types:-

- 1. Stock Trays.
- . Stock tray for dentulous patient (Perforated).
- . Stock tray for edentulous
  patient
  (Non perforated).

2. Special Trays.







#### **Tray Selection**

- 1. Select a tray with 4-5 mm of clearance with soft tissues.
- 2. Maxillary trays should extend from the labial vestibule to slightly beyond the vibrating line.
- 3. Mandibular trays should cover the retromolar pad area.
- 4. Trays can be modified with wax or impression compound to extend the tray if desired.











#### **Factors effect in selection of stock tray**

- 1. The type of material use in the primary impression procedure.
- 2. Size of the arch.
- 3. Form of the arch.
- 4. The stock tray should cover all the anatomical landmark needed in the complete denture and this is a most important point.
- 5. Stock tray should give a sufficient space to impression material in all direction (the stock tray should leave sufficient room or space for impression material (4-5 mm).



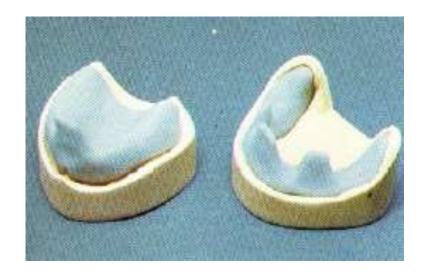


#### **Special Tray (individual or custom tray)**

Individualized impression tray made from a cast recovered from primary impression it is used in making a final impression.

#### **Advantages of special trays:**

- 1. They are easy to manipulate.
- 2. Economy.
- 3. Comfortable to the patient.
- 4. They accommodate the irregular feature of the mouth.
- 5. Control the flow of impression material.
- 6. Help to produce an impression of even thickness, small bulk and correct extension.



#### The material used for making special tray

- 1. Cold cue acrylic resin (self-curer acrylic resin).
- 2. Shellac base plate.
- 3. Impression compound.

Some time we can use hot cure acrylic but more common use cold cure acrylic resin, we have two types of special trays:

- 1. Close fit special tray.
- 2. Spaced special tray (without stoppers or with stoppers).



