

Sequences of operations Complete denture

The transfer of occlusal forces – mucosal only.
Tissue supported (born) denture.
Made usually of the acrylic resin - methylmetacrylate.

Sequence of operation

- I. phase in dental office
- Taking impression (alginate the best choice)
- I. phase in dental lab

Pouring: gypsum model
Fabrication of the individual impression tray – shellack or acrylic

II. phase in dental office

Ranging with the special low – fusing wax (the functional tray). This procedure is done in the patient. The tray must be accurate without any excess, the wax makes the tray more precise, patient moves with his/her lips and cheeks – the function is important for the impression of details. After this procedure the tray is called the functional tray. The impression after that is called the functional impression. During this procedure patient is moving with his/her lips and cheeks again. The most suitable material is the zincoxideugenol paste – a special impression material for edentulous jaws.

II. phase in dental lab

Ranging of the impression with the wax
The border of the functional impression.
must be protected using the wax strip. After that. The bite template is fabricated as usually using shellack or acrylic for the base, the wall is made of wax. The width of the wax wall in frontal area is around 8 mm, in posterior area 10 mm.

III. phase in dental office

Registration of the intermaxillary relationship.

The procedure consist
of two steps

1. Vertical relationship. The neck of the patient is perpendicular to the horizontal plane. The occlusal plane must be parallel to the bipupilar line in the frontal area and to nasauricular line in the posterior area. The wax walls must be plain cut, the height is according to the free position of the mandible. After that the height is reduced – 2 mm. This is a vertical relationship.

2. Horizontal relationship

The head of the patient is bent backward and he/she swallows. This can help us to find the horizontal relationship. After these procedures the wax walls must be put together (with paperclips or wax or other material). After the bite registration in the same phase the colour of teeth is chosen using the colour card (colour shade guide).

III. phase in dental lab

The wax pattern of the denture is made

This is made of wax – base and acrylic teeth are built in it.
according to the registrate using the articulator or occludor.

IV. phase in dental office

The wax pattern of the denture is tried in the patient, the occlusion, aesthetic and fonation are checked.

IV. phase in dental office

The wax pattern is flaked into a four parts flask using gypsum

The teeth are insulated with a special silicone material.

The flask is closed and filled with the gypsum completely.

After the hardening of the gypsum the flask is opened and the wax removed

The wax is removed using hot water. A thin tin foil is put

on some places, esp. on palatal suture in order

to unload them. The insulating agent based on alginate is used.

The flask is filled with the resin dough (mixed of powder and liquid), closed and put into a special cleap.

The resin is polymerized

using the 2,5 hours

polymerization

Schema:

1. During 1 hour reach

the temperature 70°C,

2. 30min interrupt heating

3. During further 30 min increase

the temperature – reach 100°C

4. 30 min stay on 100°C.

After that let the flask cool slowly.

The denture is taken out finished and polished

using special burs, grinding and polishing pastes.

V. phase in dental office

The denture is given over to the patient and the patient is informed how to use it.