

The Taking of dental impressions

Technique of the clinician-Practical session notes. Unit Two

- Preparation of patient
- Positioning of patient
- Correct loading of alginate in tray
- Position of clinician
- Manipulation of loaded tray

Preparation of Patient

- Inform patient of procedure
- Obtain informed consent
- Advise patient

Positioning Patient

- Patient can be either upright or supine
- Make sure chair is in the correct position for the clinician to prevent straining or over reaching

Correct loading of alginate in tray

- Hold tray by handle
- Place sufficient alginate material to cover tray edges
- Do not over fill
- Turn tray over to ensure the holes are filled, if not then push the alginate in further using spatula to eliminate air bubbles
- Smooth off excess material

Position of clinician

- If patient upright, stand in front of the patient for the lower arch and behind for the upper arch
- If supine, seated behind the patient for both arches

Manipulation of loaded tray

Insertion in the mouth- use this method when trying the trays in for size

- Ask the patient to open their mouth
- Gently retract lips and cheeks
- Slide tray over the teeth, one side first
- In the lower arch, ask patient to curl tongue to the back of the mouth

Seating the tray-

- In the lower arch, as the loaded tray is over the teeth, gently press the loaded tray down onto the anterior teeth first and then apply even pressure all the way round whilst holding the lips and cheeks away from the tray
- In the upper arch, gently press the loaded tray buccally before applying even pressure all the way round
- Ensure tray is fully seated into the sulci, not traumatic to the soft tissue
- Muscle trim

Setting of material-

- Do not move tray whilst setting
- Maintain firm pressure on body of the tray
- Avoid dragging the impression material
- Check that material is set and then leave a little longer to ensure the material is set throughout the impression

Removal from the mouth-

- Do not apply pressure to the tray handle
- Free seal in the buccal sulcus bilaterally
- Free anteriorly
- Lift out vertically
- Twist impression tray to remove from the mouth
- Rinse and disinfect impression

Ideal features of the dental impression

- All the surfaces of erupted teeth
- Fully extended into the labial and buccal sulcus to ensure that when impression is cast the model shows all the teeth and the supporting alveolus
- Palatal vault as far as the distal surfaces of the first molars

Recording the occlusion (bite)

- Soften pink wax wafer
- Make a horseshoe
- Place on the occlusal surface of the teeth
- Buccal teeth in centric occlusion
- Remove, cool and disinfect

Recording occlusion for functional orthodontic appliance

This can only be carried out by an orthodontist, orthodontic therapist or GDP.

Errors that occur during the taking of impressions

This can occur because of errors-

- in the mixing of the dental impression material
- Positioning of the impression tray
- The early removal of the impression tray
- Patient anxiety (pulling tray out, strong gag reflex, frightened)
- Inexperience