BOS
BRITISH ORTHODONTIC SOCIETY

The Taking of Alginate Dental Impressions

Practical Session Notes. Unit One

When taking dental impressions, the clinician will need to consider factors that will affect the quality of the impression,

- Patient communication
- Suitable tray selection
- Quality of the mix and consistency of the impression material
- Clinical Technique and patient preparation

Patient communication

- Always gain consent before proceeding-
  Implied consent-patient sits in the chair implying that they are ready to proceed.
  Informed consent- patient is informed of the procedure and gives consent
  Verbal consent-patient gives consent by word.
- Always explain procedure to the patient (and accompanying parent or carer)
- Always observe the patient throughout procedure and be aware of signs of emotional or physical anxiety (anxiety control and management will be discussed in Communication, module 3).
- Reassure the anxious patient

Suitable Tray Selection

Impression trays can vary depending on clinical procedure.

- Look in the patient's mouth
- Select tray
- Try in patient's mouth, make sure it-
  1. Covers all the teeth
  2. Extends comfortably into the sulci
  3. Does not over or under extend

Quality of impression mix

There are many factors to consider when mixing alginate impression material

- Always check the expiry date
- Always ensure that the powder is stored in an airtight container
- Shake and invert the powder before dispensing
- Use correct scoop, overloading and levelling off with mixing spatula
- Use correct powder to water ratio (optimum temperature 21˚c)
- Mix to a smooth, creamy consistency with no air bubbles, use manufacturers time guidelines on mixing, working and setting times

Technique of the clinician and patient preparation

- The patient can be upright or supine, always move the chair so that the patient is in the best position for you to proceed. This ensures that the clinician is not stooping or overstretched when taking the impression.
- Ensure correct loading of tray- hold handle and load tray so that all areas needed are covered, turn tray over and check that there are no air bubbles.
- Manipulation of the loaded tray (practical demonstration and lesson)

Silicones and polyethers

This impression material usually comes in two components

- Base -
- Catalyst

These are mixed together by hand (do not use latex gloves) making sure both components are evenly distributed, form into a sausage shape and load into tray.

Lighter bodied silicones and polyethers are often distributed using a gun to mix the base and catalyst together.