

Clinical Try-In & Adjustment procedure

After the laboratory procedure has been completed, the casting restoration is now ready to be tried in (checked on the prepared tooth inside patient mouth) prior to final finishing and cementation.

■ *With or Without Anesthesia*

The procedure can be accomplished in most patient without anesthesia, it give us the benefit of unimpaired tactile sensation that is of great value during occlusal adjustment. So Without Anesthesia Try-in procedure is better but sometime we use anesthesia if the patient uncooperative.

Seating the Casting

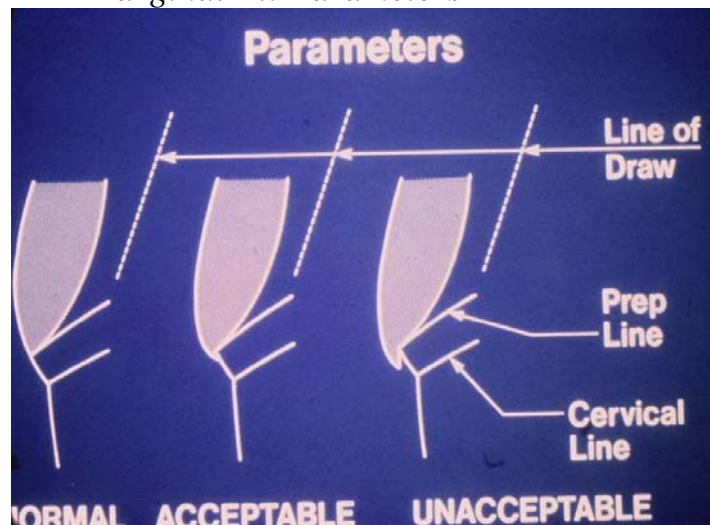
1. **Remove temporary restoration** and clean the prepared tooth from any remnant of cement because it will interfere with seating of restoration. Instruments use to remove temporary restoration;
 - a. Backhaus towel clamp or
 - b. GC Pliers
2. **Seat the restoration** on the prepared tooth with pressure.
3. **Examine the interproximal contact area;** it should be tight as the others in the mouth. Dental floss is used to check the interproximal contact by passing it between the restoration and the adjacent natural teeth, it should have slight resistance otherwise we have either;
 - a) Heavy resistance; the dental floss can't pass through the contact, this indicate that the contact is heavy and it must be reduced.
 - b) No resistance; however if the floss passes easily, it indicate that the contact area is under contoured (deficient contact) -- either you have to repeat the restoration or to correct this defect by adding solder to that area.
4. If the contact area is perfect and the crown is not seat completely this might mean that, **there is interference from inside** (metal bubbles or undercut) we use pressure indicating past (silicon wash) or spray to identify the interferences. We place it into the inner surface of the crown restoration, the crown were then seated on the prepared tooth with pressure , the restoration were then removed and inspected for any pressure (shiny) area which indicates an interference area that should relieved
5. **Evaluating Complete Seating;** the margin of the restoration is the most critical area of the restoration, we should have complete

fitness between the restoration margin and finishing line of the preparation.

Evaluating marginal integrity

To check the marginal integrity of the crown restoration, we use sharp pointed probe, the probe should be move in a two direction, the direction of the movement during checking is very important. **We should have complete fitness between the restoration margin and finishing line of the preparation.**

Marginal Fit Parameters



Types of Marginal Defects

1. Short margin (under extension, Shoulder or ledge);
margin of the crown restoration lies short of finish line of prepared tooth
2. Long margin (overextension, Overhang);
margin of the crown restoration lies beyond finish line of the prepared tooth.
3. Open margin;
margin within finish line but there is space between the restoration margin and the prepared tooth
4. Overcontoured;
margin within finish line furthermore , they are bulky (over contour).

How to check ;

- 1) Move probe from the restoration toward tooth surface, if it passed smoothly without any interpretation the margin is OKY however if there is any interpretation during this movement--- this indicate under extended margin.
- 2) Move from tooth surface toward restoration margin , if the probe catch by the margin, this indicate over extended margin (correction might lead to open margin)

- 3) If the probe passes smoothly in the two directions this means the margin extension is correct.
- 4) If there is space between the restoration and tooth surface at the area of f.l. & probe can go in, this means open margin

The restoration should then be examined for stability, it should not rock or rotate on the prepared tooth when force is applied on.

6. After complete seating, adjust the occlusal relationship in all mandible movements (centric and eccentric) using articulating paper. Any occlusal prematurity should be relieved using green stone bur. *Now the casting restoration is ready for the next step*

7. Margin finishing;

Objectives; is to obtain at least one mm wide margin that is closely adapted to the tooth surface at the area of finish line--- micro leakage.

- a. Sub gingival margin can be finished on the die using burnisher, no intra oral finishing is desirable because of the risk of damaging the tooth and the periodontal tissue.
- b. Supra gingival margin can be finished directly on the tooth; margin adaptation can be improved by using burnisher or dull bur.

8. The restoration now is ready for final polishing.

Objective is to provide smooth shiny restoration surface that will be less susceptible to plaque accumulation or deposition.

Purpose of Polishing;

Polishing is performed in order to provide a restoration that have;

- 1) Glossy surface
- 2) Plaque resistant
- 3) Tarnish/corrosion resistant
- 4) Good appearance

Surface defects and roughness are removed by grinding with abrasive particles bound on grinding stone or rubber wheel or paper discs or it applied as abrasive paste. The most commonly used abrasive is Tripoli on soft Robinson bristle brush