

CLINICAL TECHNIQUE FOR CLASS III, CLASS IV AND CLASS V

CAVITY PREPARATION FOR COMPOSITE RESTORATIONS

Three designs of tooth preparations for composite restorations, and sometimes they are used in combination. The designs include:

- (1) Conventional (2) Beveled conventional (3) Modified

Class III Tooth Preparation:

There is a choice between facial or lingual entry into the tooth

Indications for Lingual Approach

- 1- To conserve facial enamel for enhanced esthetics.
- 2- Carious lesion is positioned lingually.
- 3- Lesion is accessible from the lingual.
- 4-Color matching of the composite is not as critical.
- 5- Discoloration or deterioration of the restoration is less visible.

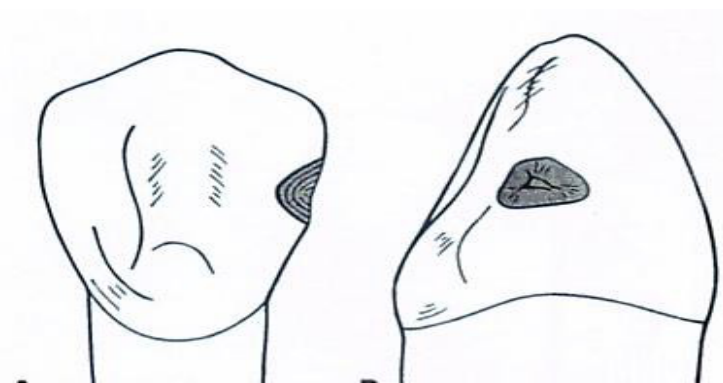
Indications for Facial Approach

- 1- The carious lesion is positioned facially
- 2-Teeth are irregularly aligned, making lingual access undesirable.
- 3- Extensive caries extent into the facial surface.

Modified Class III

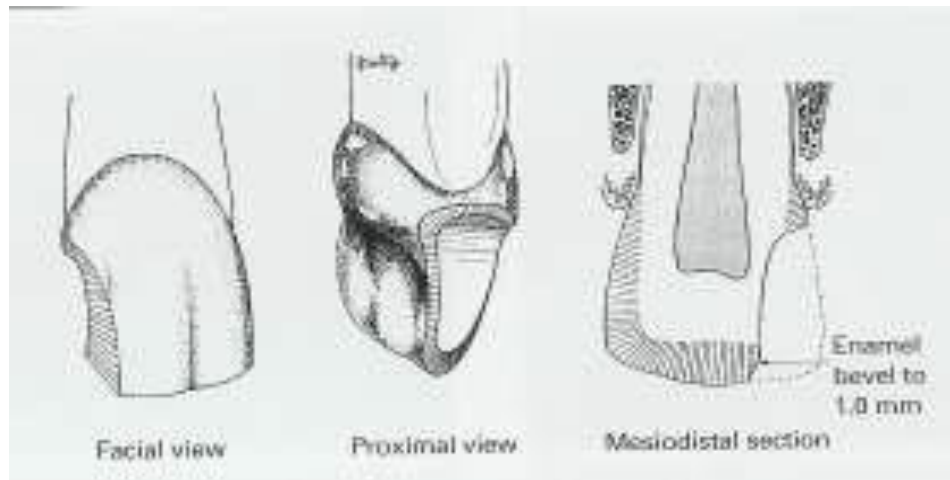
- most used type of cavity preparation.
- indicated for small and moderate lesions or faults.
- designed to be as conservative as possible.
- preparation walls have no specific shapes or forms.
- preparation design appears to be scooped or concave

1. Use a 1/2, 1, 2 round bur, point of entry is within the incisogingival dimension of the lesion, perpendicular to the enamel surface.
2. Remove all remaining caries or defect.



3. No attempt is made to create a uniform axial wall.
4. Place cavosurface bevel or flare at the enamel except at the gingival margin area.
5. Use a flame shape or round bur resulting in a 45 degrees angle to the external tooth surface.
6. Bevel width should be 0.25 to 0.5mm.
7. Clean the preparation of any debris and inspect final preparation.

Class IV Tooth Preparation



- preoperative assessment of occlusion is very important (placement of margin in noncontact areas)
- shade selection is more difficult.
- preparation is similar to Class III except that the preparation for class IV is extended to the incisal angles

For fracture: If no caries or pulpal involvement a bevel is the only preparation necessary 1.0-2 mm enamel bevel should be placed around the periphery of the cavity

Use of Pins:

- * Retentive pins are not needed because the adhesive technique provides sufficient retention for the restoration

Class V Tooth Preparation

Modified Class V

- indicated for small and moderate lesion and lesion entirely in the enamel
- no retention grooves
- lesion is scooped out
- preparation has divergent wall
- axial wall does not have uniform depth
- prepare tooth with round or elliptical instrument
- preparation is extended initially no deeper than 0.2 mm
- no effort is made to prepare a 90 degree cavosurface margins.
- infected enamel is removed with a round bur or excavator.

