Title Page.

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Program : BS D.T

: 6th semester.

Department : A.H.S

Subject. : Operative Dentistry.

Assignment : Viva assignment.

Mecdule. : 6th semester.

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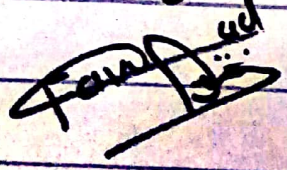
Date : 10/7/2020.



"Tooth Preparation"

Defⁿ:-

→ The process of Removal of diseased and or Health enamel, dentin, and Cementum to shape a tooth to recieve a restoration.

Principles of Tooth preparation.

- Preservation of tooth structure.
- Retention and Resistance.
- structural durability.
- marginal integrity.
- Preservation of The periodontium.

Armamentarium:-

1. Handpiece.
2. Round ended tapered diamond.
3. 171L bur
4. Torpedo diamond.
5. Torpedo bur
6. short Need. diamond
7. Red Utility wax.

Tooth Preparation For porcelain Jacket Crown:

→ It is an artificial non metallic ~~Crown~~ restoration made of "porcelain" used to covers the all surface of the clinical Crown.

→ A jacket crown is a Full porcelain ceramic covered Crown which is used to protect the entire surface of a tooth.

→ These crown are Fitted over the remaining part of the tooth to make its strong and give the shape and Contour of a Natural tooth.

Indication:-

- Hig esthetic requirement
- Considerable proximal caries.
- For severe discolored anterior teeth.
- For anterior teeth especially incisor.
- Endodontically treated teeth with post and core.
- incisal edge resonable intact.

Contra Indication:-

- Bruxism.
- Edge to edge Occlusion.
- Thin Teeth Facio-lingually.
- Unfavorable distribution of Occlusal load.
- When superior strength is required.

- The insufficient coronal tooth structure for support (very short teeth).

Advantages:

- superior esthetic
- They are very strong.
- They have best ceramic effect of all dental restoration.
- High retention since it can be etched or bonded.
- Good tissue response even with subgingival margin. (biocompatible).
- Are the best to used on the incisor.

(5)

Disadvantages:

- Have High risk of Fracture because they are brittle.
- Reduced strength compared to metal Crowns.
- Proper preparation is extremely critical.
- Brittle Nature of The material.
- Recommended as single restoration only.
- Among The least conservatives preparation.

(6)

Tooth Preparation :

(1): A shoulder of Uniform width (1.5 mm) is used as gingival FL to provide a Flate to seat to resist The Forced directed From incisal.

(2): The Incisal edge should be Flate and prepared with slight inclination Lingually.

(3): All sharp angles of preparation. Should be slightly rounded to reduced The changes Concentration and Fractured.

(4): It should be avoided on teeth with edge to edge occlusal relation.

Step in preparation :-

Incisal Reduction :-

- This step is the complete reduction of incisal edge that should provide 1-5 to 2 mm. of clearance. For porcelain in all masticatory movement.

- Flate and taper diamond bur is used, with placed parallel to the incisal inclination. (For post teeth "2mm" occlusal clearance is needed to all cusps).

- "1-3 mm" in depth are made on the incisal edge using a Flate and tapered Fissure bur parallel to the incisal inclination of the prepared incisal edge.

- Check in centric and acentric occlusal relation.

(B) Labial Facial Reduction:

Two plane reduction:

- This reduction should be done in 2 planes:

(1) Incisal Plane:

- There are 1mm are placed, these groove should be parallel to the inclination of this area.

- Any tooth structure b/w "DOG" were then removed following the contour of the tooth.
  (Keep the bur at the same angles)

(2) Gingival Plane:

- DOG 1mm are placed in gingival part of lingual surface. parallel to the long axis of the tooth.

(9).

- Any tooth structure b/w D.O.G can be removed using Flat-end tapered Fissure bur. to to creat shoulder. F.L.

(C) Lingual Reduction:-

- As They For deeper reduction (1 mm).

(1) Cingulum area Reduction:-

- D.O.G of 0.8 mm placed in the center.
- small wheel or pear shaped as diamond bur is used which can inclination in reduced The area.

(2) Lingual Axial Reduction:-

- D.O.G of 0.8 mm placed parallel to the long axis of The tooth.
- Flate end Tapered Fissure bur is used to reduced Thes area using The same angles.

THE END

THANK YOU