

# Crown And bridge

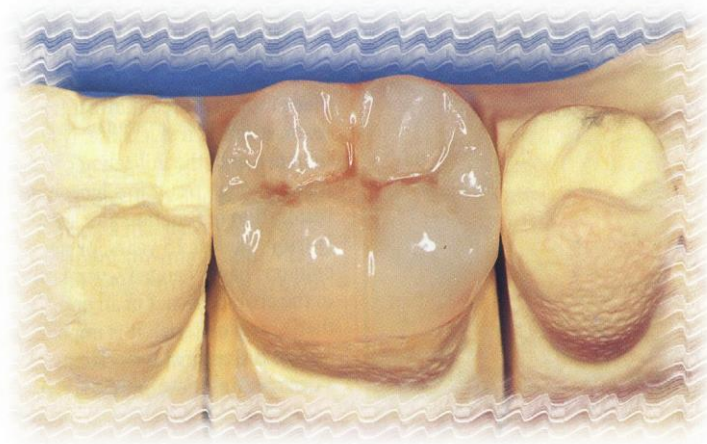
Lecture .2

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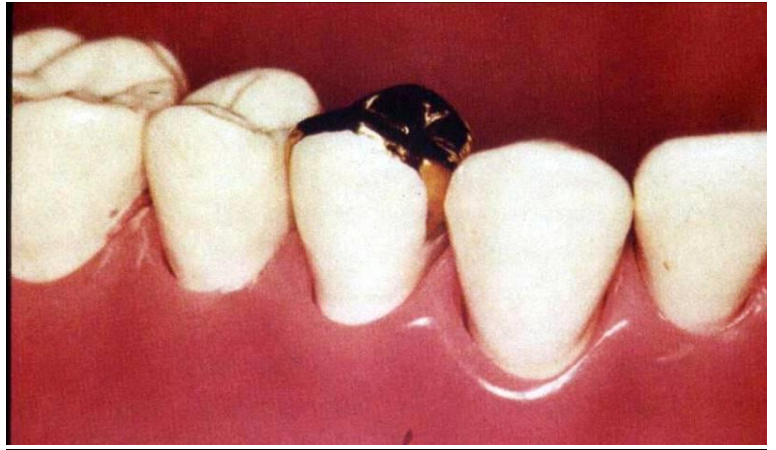
## TYPES OF CROWNS:

### THERE ARE THREE MAIN TYPES OF CROWN:

1. **Complete crown:** It is the crown that covers all the coronal portion of the tooth, Such as full metal crown, Jacket crown, which is a complete crown, made of Plastic material.



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2. **Partial Crown:** It is a crown that covers part of the coronal portion of the tooth such as 3/4 Crown.
  3. **Post crown:** Crown with complete replacement of the coronal portion of the tooth: This type of crown retains itself by means of a post extended inside the root canal of the tooth such as a post crown.



### **Objectives of tooth Preparation**

1. To eliminate undercuts from the axial surfaces of the tooth.
2. To provide enough space for the crown restoration to withstand the force of mastication, this space depends on the material used, so the metal material needs little space while the plastic material needs more space.

### **Disadvantages Of crowns**

1. Heat generation during preparation of the teeth, this heat generation might affect the health of the pulp.
2. Over preparation can cause pulp irritation which might lead to death of the pulp, therefore a good water coolant must be used during preparation procedure. Excessive tooth preparation can also weaken tooth structure.
3. Periodontal problems, food Impaction, and secondary caries might develop.

### **Steps in crown construction**

1. **Diagnosis**: The first step should be the diagnosis of the tooth and Surrounding Structures(this include)

***a). Periodontal Examination:*** Proper oral hygiene should be available to ensure that no plaque accumulation is formed on the crown margins, which might lead to caries.

***b). Dental examination by:***

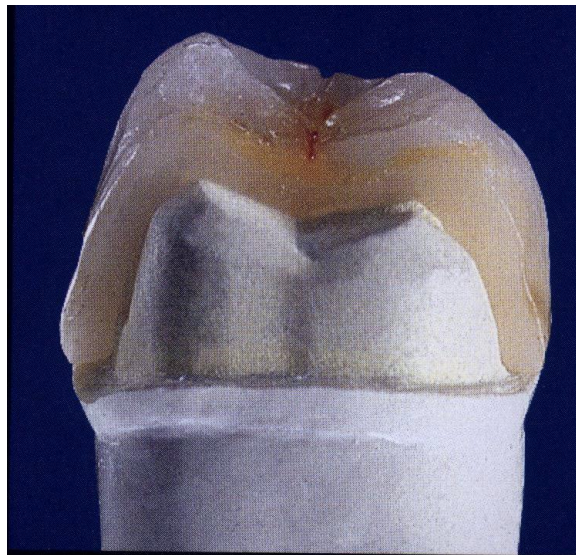
**(i) Visual:** The occlusion, Crowding, Spacing, Rotation of teeth are examined .The condition of remaining tooth Structure and future treatment is also analyzed.

**(ii) Radiographic:** The radiographic image reveals the condition and shape of the roots and surrounding structures.

A lesion in the bone, root canal treatment, fracture in the tooth& root, bone Loss, unerupted teeth, Size and number of teeth etc...These information affects the prognosis of the treatment.

***2. Tooth Preparation:*** It is the cutting or instrumentation of the abutment tooth to be in a form to seat a crown on it.

***Prepared tooth:*** It's the final form (shap) of the abutment tooth after cutting (Preparation) procedure.



- 3. Final impression.***
- 4. Temporary restoration (Crown or bridge).***
- 5. Construction of working model.***
- 6. Waxing.***
- 7. Investing.***
- 8. Wax Elimination.***
- 9. Casting.***
- 10. Finishing and polishing.***
- 11. Cementation of the restoration.***