

Second stage 2023

Prosthesis: is the replacement of an absent part of human body by an artificial part.

Dental prosthesis: is the device or restoration which replaces one or more lost teeth, portion of the crown or the entire crown.

There are two types of dental prosthesis

1-Removable dental prosthesis: is the restoration that inserted and removed by the patient. It could be:

A-Partial denture: which is supported in part by the remaining natural teeth and in part by the edentulous ridge

B-Complete denture.

2-Fixed restoration (fixed partial denture):is the restoration that is firmly held in place and cannot be removed by the patient. Fixed partial denture gains its support solely from remaining natural teeth.

Crown and bridge: It's a branch of dental science that deals with restoration of damaged teeth with artificial crown and replacing the missing natural teeth by fixed prosthesis [Fixed partial denture].

Crown: It's A fixed Artificial restoration of the coronal Portion of a natural tooth .It must restore the morphology, contour and the function of the tooth and should protect the remaining tooth structures from further damage.

Bridge: It's a fixed prosthesis constructed to replace the missing [one or more] teeth .

Abutment: is the natural tooth which supports the bridge and on which retainer is cemented.

Retainer: is that part of the bridge which is cemented to the abutment tooth and it could be any type of crown or inlay.

Pontic: is that part of F.P.D. which replaces the missing tooth and restore the function and aesthetic of missing tooth.

Connector: is that part of F.P.D. which connects a pontic to a retainer or two retainers to each other. Connectors could be either fixed or allow some movements between the components that they join.

Pier abutment: is an abutment tooth standing between and supporting two pontics, each pontic being attached to a further abutment tooth.

Span: is the space between natural teeth that is to be filled by the bridge. **Unit:** A unit when applied to bridge work means either a retainer or a pontic. A bridge with two retainers and one pontic would therefore be a three unit bridge.

Inlays: are intracoronal restorations which are manufactured in the laboratory and cemented in place into the prepared cavity in the tooth. It is used to restore individual tooth contour and function. Inlays involve the occlusal, proximal surface or surfaces. It could be either: gold inlays, composite inlays and porcelain inlays.

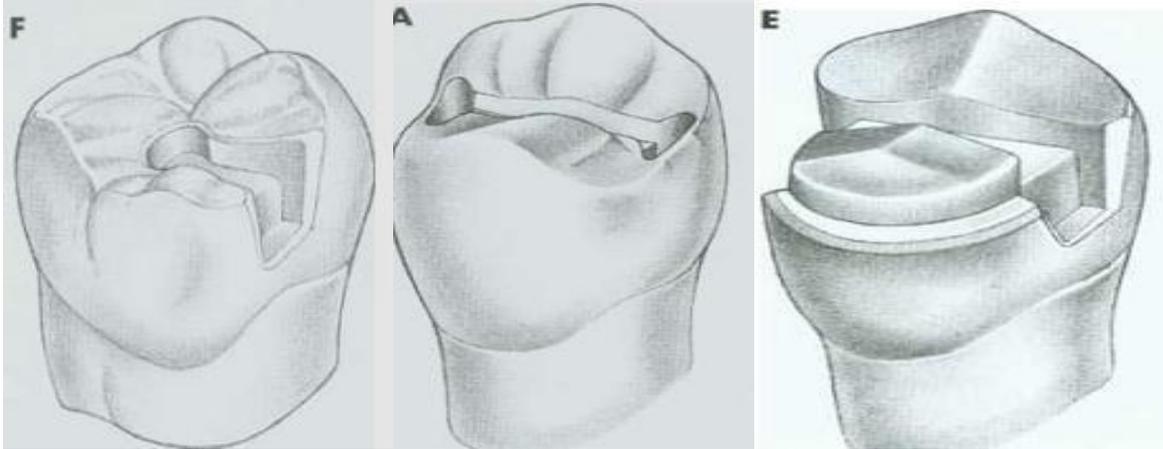
Onlays: are extracoronal restorations on the occlusal surface of the tooth. The Class II onlay involves the proximal surface or surfaces of the posterior teeth and covers the cusps.

What's the difference between inlay, onlay, and crown?

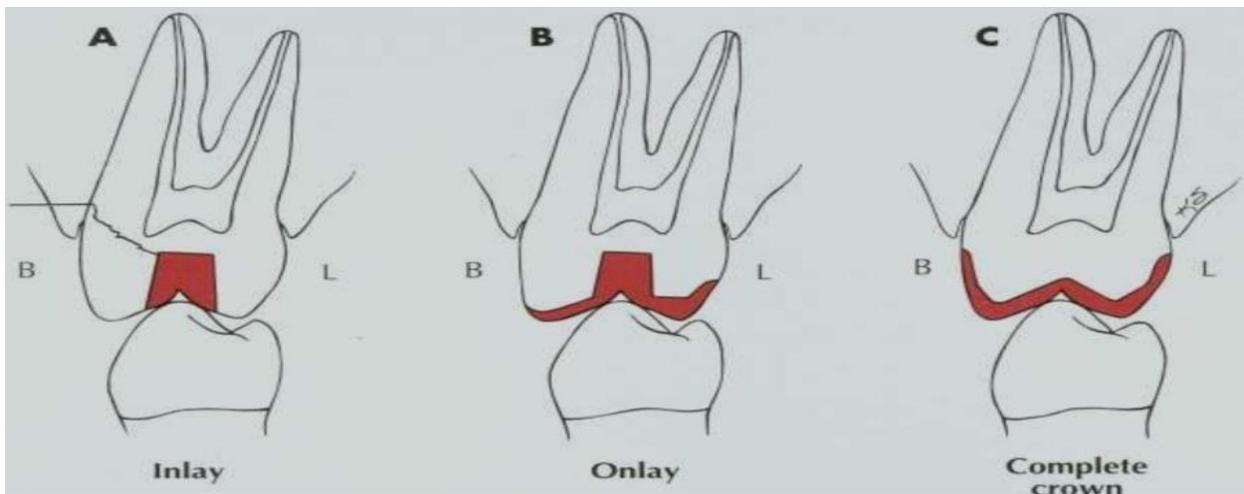
Inlay: (intracoronal restoration gain its retention from the internal surface of the prepared cavity in the tooth.

Crown is extracoronal restoration gains its retention from the outer surface.

Onlay is extracoronal restoration. The occlusal outline and proximal boxes of an onlay preparation are similar to those of an inlay. The additional steps are the occlusal reduction and a functional (centric) cusp ledge.



The MO inlay preparation on mandibular first molar The MOD onlay preparation on mandibular first premolar



Purposes Of crown Construction:

- 1-To restore the grossly damaged tooth, fractured tooth or a tooth with a heavy filling [amalgam or composite].
- 2-To restore the masticatory function and speech.
- 3-To restore the esthetic [Improve the patients appearance.

4-To maintain the periodontal health by recontouring the occlusion and prevents food impaction.

5-As a retainer for the bridge.

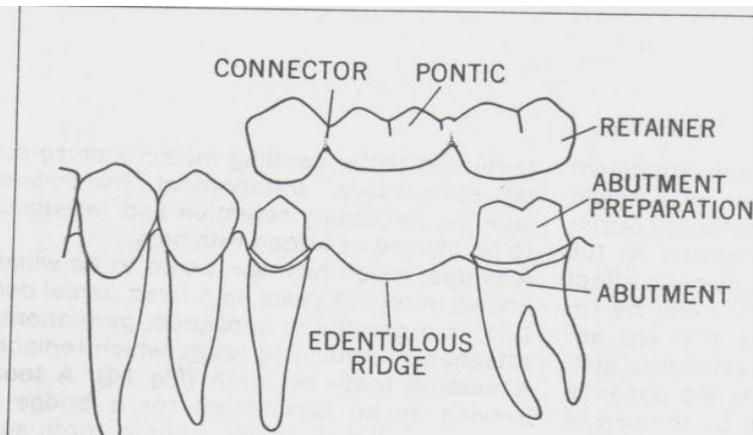
Materials used in the crown and Bridge The materials used in the construction of crown and Bridge could be either:

Metal {Gold alloy And it's alternatives} as in Full metal Crown and 3/4 Crown.

Plastic materials: Such as **Acrylic resin** as in jacket crown.

Ceramic and Zircon material.

A combination: of metal and plastic materials as in full veneer Crown.



THANK YOU