

Introduction

“**Fixed prosthodontics** is the specialized area of dentistry involved in the replacement of damaged or missing teeth with a cast prosthesis permanently cemented in place”.

Or “Fixed prosthodontics treatment involves the replacement and restoration of teeth by artificial substitutes that are not readily removable from the mouth. Its focus is to restore function, esthetics, and comfort”.

Indications for Fixed Prosthodontics

- 1) One or two adjacent teeth are missing in the same arch.
- 2) The supportive tissues are healthy.
- 3) Suitable abutment teeth are present.
- 4) The patient is in good health and wants to have the prosthesis placed.
- 5) The patient has the skills and motivation to maintain good oral hygiene.

Contraindications for Fixed Prosthodontics

- 1) Necessary supportive tissues are diseased or missing.
- 2) Suitable abutment teeth are not present.
- 3) The patient is in poor health.
- 4) The patient is not motivated to have the prosthesis placed.
- 5) The patient has poor oral hygiene habits.
- 6) The patient cannot afford the treatment.

Terminology

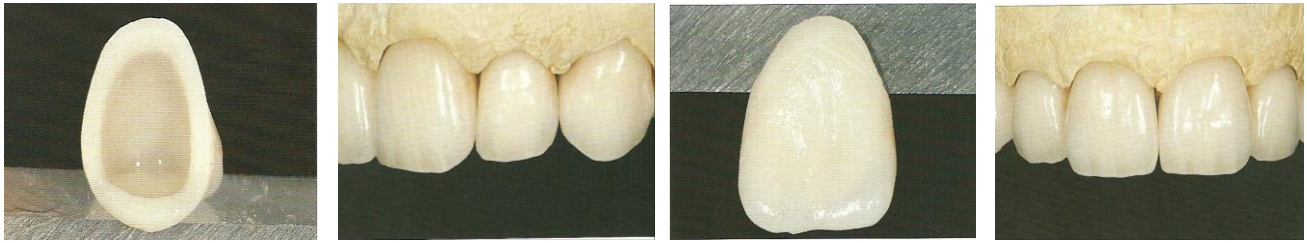
Crown: is an artificial replacement that restores missing tooth structure by surrounding most or all of the remaining structure with a material such as cast metal, porcelain or a combination of materials such as metal and porcelain.

Full Metal Crown: is a full coverage all metallic restoration rebuilding the prepared clinical crown of the natural teeth.

N.B. Mainly used in posterior teeth.



Jacket Crown: is a non metallic restoration “acrylic”, rebuilding the prepared anterior teeth mainly for esthetic.



Veneered Metal Crown: It is a full cast metal crown having an acrylic or porcelain facing on the labial or buccal surface.

Full Veneered Metal Crown: is a full cast metal crown having all surfaces faced with porcelain.

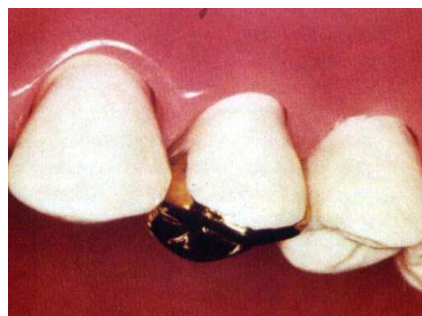
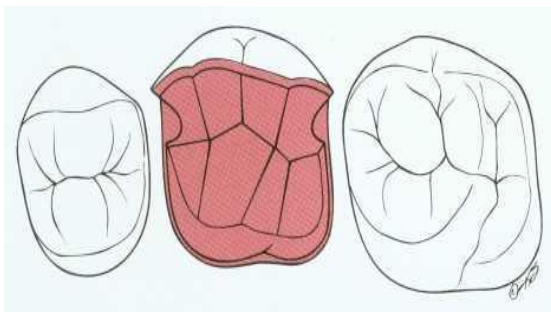


Post Crown: is a full coverage crown that gains its retention by a post inserted in the prepared root canal.

It has a radicular part inserted in the prepared root canal and a top part outside the root canal.

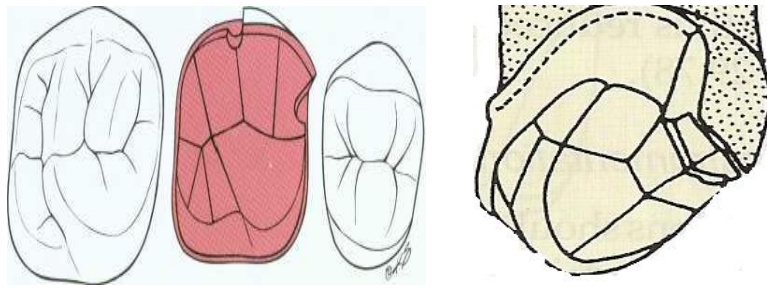


Three-Quarter 3\4 Crowns (partial Veneered Crown): Restore the occlusal or incisal surface and three of the four axial surfaces the proximals, palatal/lingual, and retained in position by grooves prepared on the prepared proximal surfaces. (not including the facial surface).

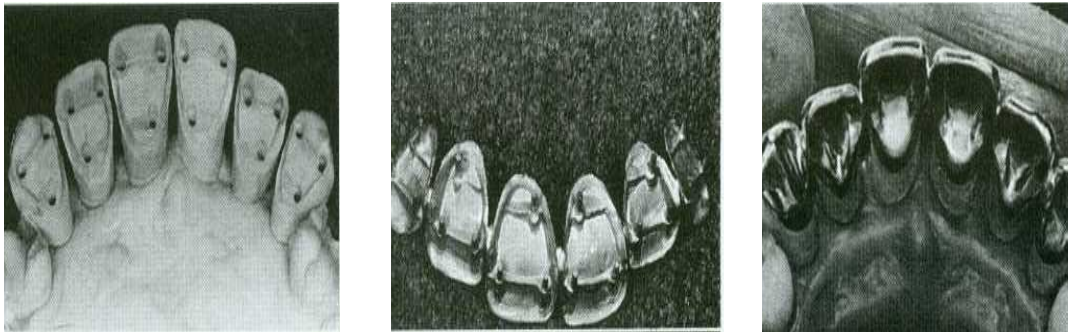


Reverse Three-Quarter Crowns: Restore all surface except the lingual/palatal surface, usually used with lower premolars.

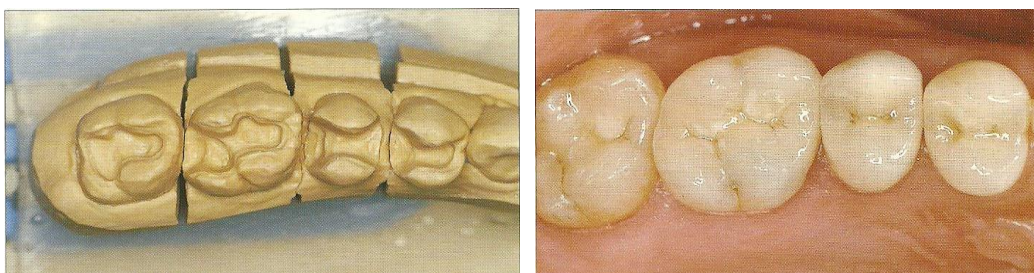
Sevens-Eighths Crowns: Are extensions of the three-quarter crown to include a major portion of the facial surface, except the mesio-buccal cusp of maxillary molars



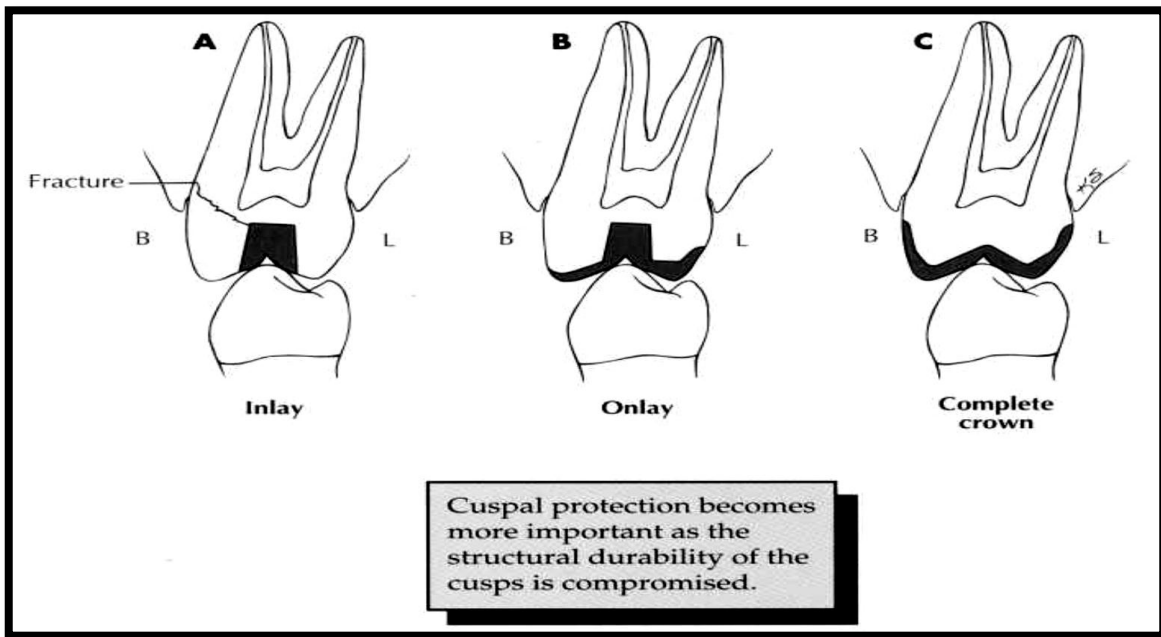
Pinledge Retainer: Refers to the modification of an anterior three-quarter crown preparation to obtain primary retention and resistance from long parallel pins in the lingual/palatal surfaces of the clinical crown



Inlay Retainer: It is a classic intracoronal cast restoration that restores the proximal and occlusal surfaces but does not protect or cover the cusps entirely



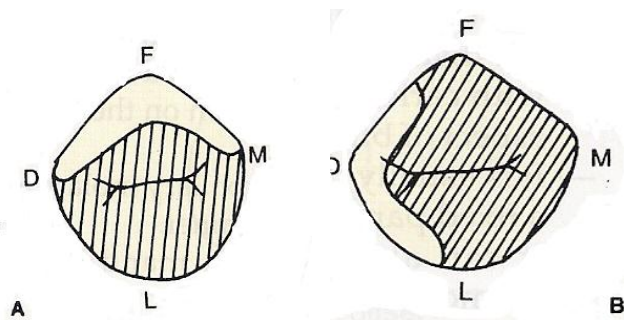
Only Retainer: Is a modification of the inlay with cuspal overlays on the occlusal surface to protect the integrity of the remaining tooth structure.



Temporary Crown: Is a crown made and used temporarily for the protection of the prepared tooth till the crown or bridge is completed and ready for cementation



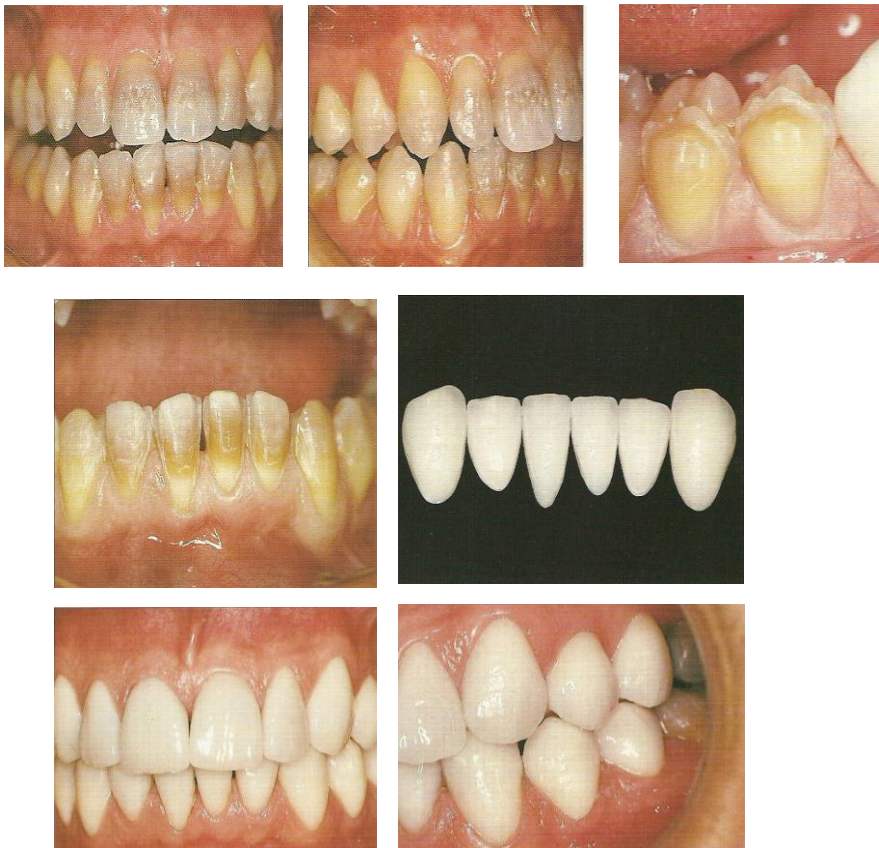
One-half crown veneers: Restore the occlusal and mesial surfaces, as well as portions of the facial and lingual surfaces. It is a modified form of three-quarter crown



A) Normal three-quarter crown with an intact facial surface.

B) Proximal half crown. Here, the distal surface is left intact.

Laminates: Are veneer restoration that restore the facial surface of a tooth for esthetic purposes. They are fabricated from resin or dental porcelain. They bond to etched enamel with a composite resin luting agent.



Bridge

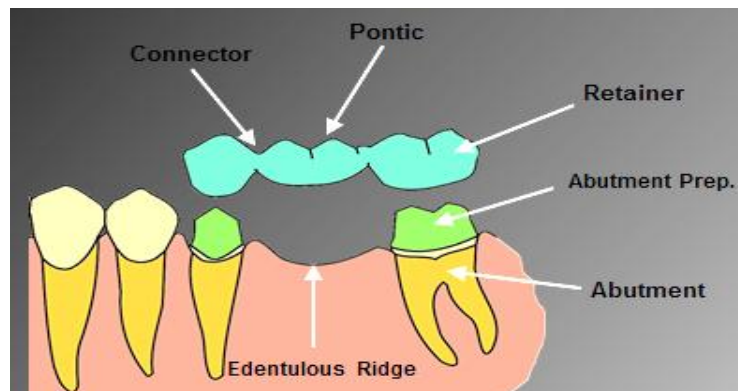
Bridge: (Fixed Partial Denture), (Fixed Prosthesis), fixed Replacement (Fixed Appliance): Is a masticating or incisive surface of metallic and/or nonmetallic material spanning an edentulous space in the dental arch and firmly anchored at one or both ends to the adjoining teeth.

Abutment Tooth: Is the prepared natural tooth which supports and retains the bridge at one or both terminals.

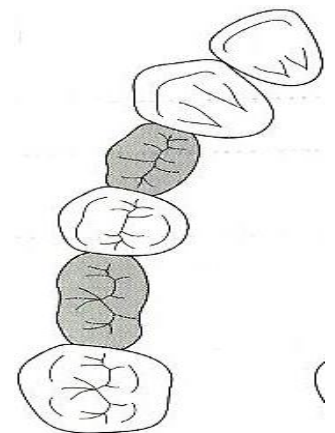
Retainer (Attachment), (Abutment Piece): Is a restoration rebuilding the prepared tooth and connecting the pontic to the abutment.

Pontic: (Dummy) is that part of the bridge which acts as the actual substitute for the lost tooth and is suspended between the retainers replacing the lost natural tooth functionally and esthetically

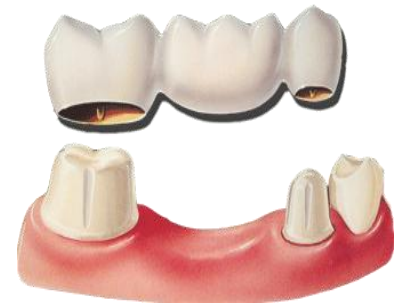
Connector Joint: Is that part of the bridge uniting the pontic (s) with retainer (s) joining the component parts of the bridge



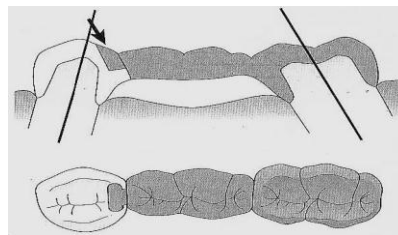
Pier Abutment: Is an isolated tooth where the adjacent anterior and posterior teeth are missing



Fixed Fixed Bridge: (*Fixed Bridge*), (*Rigid Bridge*), (*Fixed Rigid Bridge*), (*Stationary-Fixed Bridge*). Is a bridge where the abutment pieces and Pontics are all soldered together and the bridge is cemented at both ends to the abutment teeth



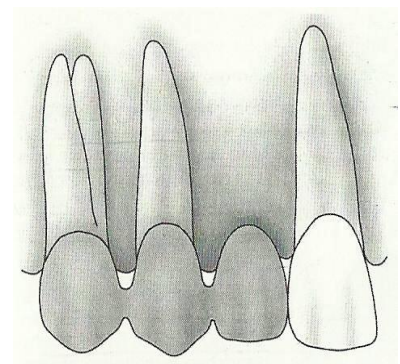
Fixed Supported Bridge: (*Fixed-Movable*), (*Limited Stationary*), (*Broken Stress Bridge*), (*Semi-Rigid*), (*Fixed-Semirigid Bridge*). Is a bridge which is not actually joined to one of the terminal abutment teeth but is connected to it by means of a non-rigid connector allowing some individual movement of the abutment tooth



Removable Bridge: (*Precision Attachment Bridge*), (*Removable partial Denture with internal attachment*). Is a bridge where each retainer consists of two parts, one fixed to the abutment tooth, and one soldered to the pontic and the bridge can be removed at the will of and by the patient for cleansing purposes



Cantilever Bridge: (*Swing on Bridge*), (*Free end Bridge*) is a bridge where the pontic is fixed to and derives its support from double retainers at one end only while the other end is unsupported.



Spring Cantilever Bridge: Is a cantilever bridge where the pontic is at the end of slightly resilient curved arm deriving its support from an abutment remote from the edentulous space

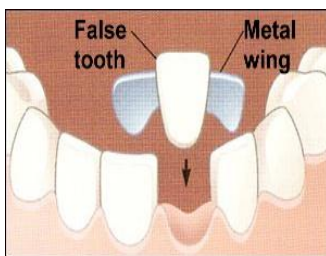


Immediate Bridge: (Immediate replacement Bridge), (Immediate Fixed Partial denture). Is a bridge with root extension pontic and is constructed before extraction of the tooth and seated in position immediately after the extraction at the same visit

Temporary Bridge: Is a bridge made and used temporarily for the protection of the prepared teeth and maintenance of the space till completion and cementation of the bridge.



A minimum-preparation bridge (resin bonded bridge, adhesive bridge, Maryland bridge): Is attached to the surface of minimally prepared (or unprepared) natural teeth and therefore occupies more space than the original dentition



Implant supported bridge:

A single implant may support a single tooth prosthesis or a series of implants may support a prostheses replacing a number of teeth.

