Crown and Bridge

Lecture.

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Definitions:

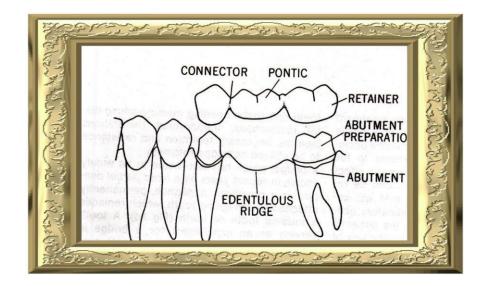
1. <u>Crown and Bridge</u>: It's a branch of dental science that deals with restoration of damaged teeth with artificial crown and replacing the missing natural teeth by fixed prosthesis [Fixed partial denture].

2. <u>Crown</u>: is a cemented extracoronal restoration that covers, or veneers, the outer surface of the clinical crown or implant. It must restore the morphology, contour and the function of the tooth and should protect the remaining tooth structures from further damage.

3. <u>**Bridge:**</u> It's a fixed prosthesis constructed to replace the missing [one or more] natural teeth .The tooth that gives support to the bridge is called an <u>*abutment tooth.*</u>

Components of the bridge:

- <u>Retainer</u>: It's the part bridge that covers the <u>abutment tooth</u>, which could be major or minor retainer. When the <u>retainer</u> is attached to a fixed connector it's called <u>a major retainer</u>, but when it is attached to a <u>flexible</u> [movable] connector it is called <u>a minor retainer</u>
- 2. <u>Pontic</u>: It's the part of the bridge that replaces the missing natural tooth (or teeth), which is the suspended part of the bridge. It occupies the position of the missing natural tooth.
- 3. <u>Connector</u>: It is the part the bridge that connects the <u>retainer</u> to the <u>pontic</u>, which could be fixed or movable connector.



Materials used in the crown and bridge

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

- 1. <u>Metal {Gold alloy and it's alternatives}</u> as in full metal crown and 3/4 crown.
- 2. <u>Plastic materials:</u> Such as <u>Acrylic resin</u>, <u>Porcelain and</u> <u>zirconium</u> as in jacket crown.
- 3. <u>A combination</u>: of metal and plastic materials (acrylic and porcelain) as in full veneer crown.



Purposes of crown construction:

The main Purposes of crown construction are:

- **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.