



Single Crown

INFORMATION SHEET

Crown

A crown is a “cap” that completely covers a tooth with a cavity or other damage. The dentist files down part of the natural tooth to make room for the crown. The crown protects the tooth and restores its original colour and shape.

Why have a crown?

- To cover a tooth with a large filling.
- To protect a tooth that is weakened, for example by a cavity, from the risks of breakage.
- To restore a tooth that is already broken or worn down.
- To cover a misshapen or discoloured tooth.
- To restore a tooth after a root canal treatment.
- To use as an abutment for a bridge.
- To cover an implant or root post.

Treatment steps in making a crown

Prior exams

Clinical and radiological exams provide information for assessing the tooth and soft tissue. In some cases, reconfiguration of the gum and surgery may be required.

Preparing the tooth (Fig. 1 and 2)

The tooth's position in the mouth and how the patient wants the tooth to look may, in some cases, also be reasons for a dentist to prepare a tooth for a crown:

- made entirely of metal
- made of ceramic-metal alloy
- made entirely of ceramic



Regardless of the solution selected, the dentist's primary concern is protecting the tooth's vitality.

Although the teeth to be used for the crown do not require a root canal treatment, sometimes when the dentist is filing down the tooth, they find that a root canal may be needed. This may be due to significant damage to the tooth, inflammation, or damaged pulp. Therefore, depending on the condition of the devitalized tooth, cementing a post into the tooth's root may be indicated to provide support for the crown following the root canal treatment.

Temporary crown (Fig. 3 and 4)

When a single crown is made for a tooth, treatment involves a series of important and inter-dependent steps:

- impression
- try-in
- final cementation

The temporary crown is part of this **series and contributes to ensuring a successful treatment.**



Placement of a temporary crown:

- provides immediate protection for the tooth and gum from mechanical, chemical and infectious threats in the mouth
- prevents adjacent teeth from shifting
- minimizes the patient's impairment so they can chew and enunciate normally
- helps in designing the permanent crown
- tests function and appearance

Lastly, the temporary crown needs to be adequately cemented so the patient doesn't experience any inconvenience, while allowing the dentist to remove it as often as necessary before the treatment is complete.

Risks

With fixed prosthetic dental devices, immediate success is achieving the desired outcome on the day of placement as well as satisfaction for both patient and dentist. This needs to last over time to be a genuine success.

Complications, and even failures, may occur. Complications are primarily related to the following factors.



Loose crown or post/crown

In most of these cases, the patient has a loose, but unfractured restoration in their mouth. Single crowns can generally be easily resealed or re-cemented. However, before initiating any new procedure, the dentist needs to analyze the causes of failure and any damage caused by the loosening. If the dentist notices a cavity or if the crown is not fitting, it will need to be re-done.

Cracks or fractures in the residual tooth

The choice of an attachment as the base for a crown is always a mechanical risk for the root: first, during the root procedure, then during stress on the root when chewing. In most cases of a fractured root, the tooth needs to be extracted.

Fractured or broken ceramic

Due to progress in materials and techniques, some types of repair can be done effectively directly in the mouth. However, it is often hard to predict durability and appearance with these repairs.

Prolonged post-operative pain in a vital tooth

Generally, this requires a root canal treatment. The treatment can often be performed by making a small perforation through the crown, without having to replace it.

Other potential complications

- Short-term post-operative sensitivity.
- Temporary pain in the jaw, teeth and chewing muscles.
- Possibility of pulp necrosis (death of the tooth) resulting from teeth being filed down, requiring root canal treatment.

Long-term success and survival of fixed prosthetic devices

It is difficult to specifically determine how long a crown will last, although it should last for many years. However, it is reasonable to expect that, regardless of the quality of the initial result, the issue will need to be revisited more than once in a lifetime. Patients should be advised of this.

I gave this information sheet to patient (name): _____

Date: _____

Dentist's signature: _____