

What is a crown?

A crown is a full or partial covering over a tooth. It is usually recommended for teeth that are heavily filled, and/or have fractured, resulting in tooth structure loss. It is usually to protect a tooth from risks of further fracture and restore adequate function and aesthetics. A crown can be made from gold alloy, base metals, porcelain with a metal substructure, or full porcelain



Why do I need a crown?

Often a crown is recommended because there has been significant tooth structure loss due to large/multiple fillings, tooth or filling fracture and/or large decay resulting in a decreased amount of remaining tooth. A crown is recommended to restore the tooth to adequately function and also give a longer life-span than with another larger filling. Continuing to fill the tooth may result in fracture that is too large or too deep to fill again or even do a crown on later, thus resulting in the tooth needing to either be extracted or have adjunctive therapies such as root canal treatment.

Will my crown last forever?

The simple answer to this is no. However, the dental research shows that crowns tend to last a lot longer than direct fillings such as resin composite and large amalgam fillings. Teeth with crowns can last around 15-20 years, however this is a very broad figure and data includes crowns that last less than 1 year and ones which last 60+years so it is an AVERAGE.

How long your crown lasts can depend on (but not limited to) the following: -

- How much tooth substance you have remaining
- How well the crown was fabricated and fitted
- The material of the crown
- How well you look after it
- The health of the gum and surrounding teeth
- The forces that are transmitted to the tooth

So it is very hard to give an exact figure as to how long your crown will last, but in theory, it should last longer than a direct filling.

What are the difference in the crown materials?

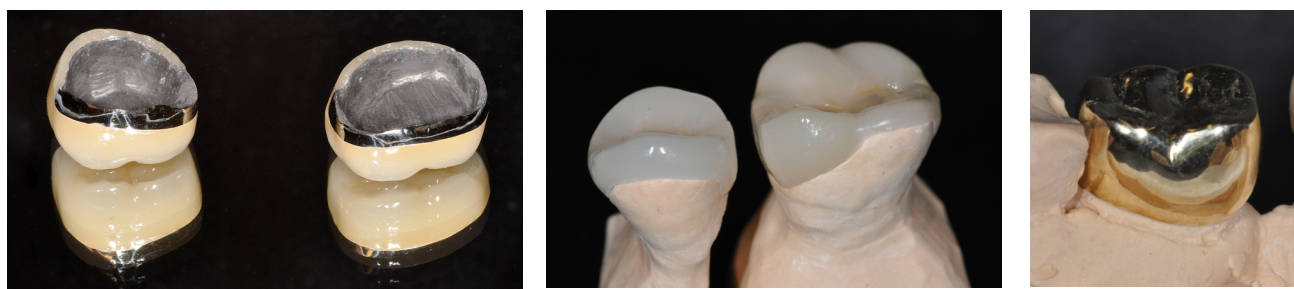
Crowns can be made from metal gold alloy, base metals, porcelain with a metal substructure or porcelain.

Often your prosthodontist will determine which would be the best option for your particular tooth.

Metal crowns have the best long-term research and are the “gold-standard” crown. It is strong and tends to last longer than the other materials. Less tooth needs to be removed during preparation as well. However, aesthetically it can be a problem as it is gold in colour.

Porcelain fused to metal gives the strength of the metal underneath it, and the aesthetics of the porcelain over the top so it matches the other teeth. It also has a good long-term history. However, because of the two layers, it does require more tooth removal.

Full porcelain crowns are much newer to dentistry so don't tend to have the very long-term research the other crowns do. Because they are porcelain, they can be more brittle and thus risks of fractures can occur. However, because they can be bonded onto the tooth, we often do not need to remove so much tooth. It blends in very well with the tooth and gives an excellent aesthetic result. With the newer stronger ceramics like zirconia being used, ceramics tend to be the most popular crown material choice these days.



What is the procedure for a crown?

There are **TWO** appointments usually, 2-3 weeks apart.

First appointment – crown preparation

You generally need anaesthetic for this appointment. Here we will remove the old filling and place a new filling (called a “core”) if required. The crown preparation requires about 1mm of tooth removal circumferentially to allow enough space for the new crown to be made without making the tooth bigger.

Sometime we will put some cord around the gum to help push it slightly back from the tooth so we can take a good mould of where the tooth was prepared

A silicone mould is taken of the tooth and the opposing teeth. After this a temporary crown is fabricated from a temporary resin material and cemented onto the tooth with temporary cement.

You should be careful with chewing on the temporary crown as it can come off. You can brush the tooth as normal but you may need to “pull floss through instead of up” when flossing.

The temporary crown is often not as smooth as your natural teeth.

If it does come off, you should call the practice to arrange for it to be recemented or a new one made.

Also you will be numb for a few hours so be careful with chewing and avoid hot drinks.

The tooth may feel sensitive afterwards this is normal and will settle down with time. If there is severe pain, you should report this to the practice immediately.

The gum may also feel a bit “sore” due to the cord, and you may need some panadol for the first 12hours.

***For front teeth, we may require you to attend our laboratory to have a more accurate colour match. Even with this matching, sometimes it is difficult to match to natural teeth and may require a few “try-ins” before we get an acceptable match. This may require more appointments whilst we try and retry the crown to ensure that we get the best aesthetic result for you.*

Second appointment – crown insertion

Again this appointment may require anaesthetic.

The temporary crown is removed and the tooth cleaned. The cord may need to be placed around the gum if we cannot see the edge of the prepared tooth. The new crown is tried in and if it is satisfactory, it will be cemented in with the permanent cement.

The bite will be checked and everything polished.

You should avoid chewing anything hard/sticky on the tooth for about 24hrs. After this, treat it as a normal tooth and make sure you are brushing and flossing regularly to avoid decay from starting underneath the crown margins.

You may feel the tooth is a little “different” in shape or contour to what you used to have. This feeling often lasts a few days.

The tooth may feel sensitive for a few days and sometimes a few weeks/months. Usually with time it will subside. If it hasn't, then you should report this to the practice.

What are possible risks of having a crown?

The dental research states that there is about 1% risk per year of complications. This means that after 10 years, there is about 10% risk of complications. Again, this is a very broad figure and a result of averages. The most common complications with crown procedures is the risk of nerve death. If this occurs, then the tooth will require root canal treatment, which can be done through a crown. The risk will depend on a multitude of factors such as how much tooth was remaining/removed, old fillings and location, location of the nerve, the health of the nerve, the bite etc. It is very difficult to determine how the nerve will react to the crown procedure, like with any filling procedure done. These risks will differ with each individual.

The other risks include secondary decay (decay underneath the crown), ongoing sensitivity, gum recession (which could expose the margin of the crown over time) and in some cases fracture of the tooth and loss of the crown. The likelihood of these risks arising differs with each person and even though can happen, are unlikely and rare.

How do I look after my crown?

It is important that you look after the crown to avoid risks of secondary decay and gum problems. Make sure you brush the crown and the rest of your teeth twice a day with a soft bristled toothbrush and also floss daily to prevent decay in between the teeth and underneath the crown margin. In short, you should look after the crowned tooth as you would your normal teeth. Regular dental check-ups and cleans will also ensure that your crowned tooth and teeth are kept into their optimal condition and any problems picked up and dealt with in a timely manner to avoid on going complications.

