University of BRISTOL

Dental crowns



BRISTOL
DENTAL
SCHOOL

What are dental crowns?

Crowns are protective restorations that sit over prepared teeth. They are made in a dental laboratory in a range of materials including metal, ceramic or a combination of metal and ceramic. Each material type has its own advantages and disadvantages; it is a good idea to talk through these options with your dental professional.



Metal crowns on upper and lower molar teeth



Old crown with poor aesthetics



Metal ceramic crowns – the front surface is porcelain and the back surface is metal

Why do I need a dental crown?

Crowns are commonly recommended when:

- A tooth has a lot of tooth tissue missing e.g. from decay / fracture
- A tooth has a large filling and requires further protection
- Root canal treatment has been completed and a strong restoration is required to protect the tooth
- Replacing an existing failing crown

What happens during treatment?

Crown treatment usually takes two appointments of up to 3 hours each - one for the tooth preparation and one for the crown cementation. It takes 2-4 weeks between appointments to make the crown in the dental laboratory. During this time, a temporary crown is provided to protect the prepared tooth. The typical stages of crown treatment include:

Tooth preparation appointment:

- The tooth is anaesthetised with local anaesthetic to keep you comfortable.
- A mould of your teeth is taken to help the dental laboratory to recreate your natural bite.
- The tooth is prepared (shaped) to enable a crown to be fitted.
- Another mould of your teeth is taken - this is used by a dental technician to make a crown.
- A temporary crown is made and fitted on your tooth.

Crown fit appointment:

- Your tooth may be anaesthetised with local anaesthetic to keep you comfortable.
- The temporary crown is removed and the definitive crown is tried-in to check the fit and the appearance.
- When you and your dentist are happy with the crown, it is cemented onto your tooth. During the cementation of the crown, you may feel some pressure on your tooth - this is normal.



Teeth prepared for crowns

What are the advantages of dental crowns?

- **Function and appearance:** Missing tooth structure is replaced providing better function and appearance
- **Reinforcement:** For heavily broken down teeth, the remaining tooth structure is reinforced
- **Tooth position:** Crowns can help maintain the correct position of the tooth

What are the risks of dental crowns?

- **Dental nerve injury/death:** If the nerve in the supporting tooth is present, there is a risk (approximately 20% chance) that it may become inflamed and die. If this occurs, a root canal treatment or tooth extraction is required.
- **Gum recession:** Over time gums can recede (shrink back) and the margins of the crown may become visible.
- **Porcelain fracture:** If porcelain is used on your crown, there is a risk this may fracture. If so, the crown will need to be replaced.
- **Temporary crowns:** Temporary crowns are not as strong as definitive crowns and can be easily broken. It is important to return for the fit of your definitive crown as most temporary crowns are not designed to last long.



Gum recession around a crown



Gum recession around multiple crowns

What are the alternatives to dental crowns?

We will always discuss the options available to you in depth before any decisions are made. Such options may include:

No treatment: However, teeth which benefit from the reinforcement provided by a crown and could be left at risk of further breakdown if left untreated.

Filling: Fillings can be used to build up lost tooth tissue, but fillings will not reinforce the structure of a tooth as a crown would.

Onlay: onlays are similar to crowns but only cover the biting surface of the tooth (compared to crowns which cover the whole tooth). Onlays can be used for teeth which have a larger amount of natural tooth left.

What happens after treatment is finished?

After your crown has been fit you will have a review appointment to check that both you and your dentist are happy with the finished result. This may involve checking your bite, checking the crown fit and checking the ability for you to clean around the crown.

To check that you and your dental professional are happy with the outcome of your treatment, you will be reviewed after your treatment is finished.

When all of your dental treatment is complete, you will be discharged from the dental school. We advise that you find a dentist outside the dental school to continue to look after your teeth and restorations.

Types of questions you may want to ask…

- What crown colours/materials are best for my tooth?
- How long do dental crowns last?
- How long will each appointment be?
- How can I best take care of my crown?

And finally…

Maintaining good oral hygiene is crucial for healthy teeth and gums, and will help reduce the risk of decay and gum disease. Brush your teeth twice daily for 2 minutes with fluoride toothpaste and clean between your teeth with floss or interdental brushes.

Smoking and alcohol increase the risk of oral disease. If you want to quit smoking or reduce your alcohol intake, please talk to the clinician you see for further advice.

It is important to attend dental check-ups regularly, as this will help your dentist to identify any dental disease early.

Please ask at reception if you require this information in a different language or format.

Contact us:

Monday to Friday,
8:30 am - 4:30pm
T: 0117 374 6647

Emergency out of hours
NHS 111

bristol.ac.uk/dental

University of BRISTOL