WHAT IS A CROWN?

Also commonly known as a 'cap' it is custom made (either by a technician in a dental laboratory or in cases of temporary crowns by the dentist in the treatment room).

It is a restoration which fits over the remaining tooth (after special preparation) and typically restores the shape, appearance and function of the tooth.

When would a crown be needed?

If a tooth has been subject to decay, had very large fillings placed in it or has been weakened by trauma or had root-canal treatment, protection of the remaining tooth is often initiated to prevent possible fracture and the need for extraction.

Other reasons for providing crowns include masking of discolouration, changing the shape of the teeth and providing support for missing teeth in the form of a bridge or denture.

What types of crowns are available?

Porcelain fused to metal crowns. These have an inner core of metal which fits over the prepared tooth, and then the porcelain is 'bonded' over the metal by a special process in the laboratory to give a strong, durable and aesthetic result. The metal used can contain no gold (non-precious) or it may contain gold. Your dentist will tell you the merits of each.

Porcelain and all ceramic crowns. There is a wide range of this type of crown available today and technology can now provide very strong and aesthetic crowns that are free of metal.

Other materials include composite and acrylic which are like hard wearing 'plastic' and may be indicated as long term temporary or even permanent crowns in some cases. Your dentist will also provide you with a temporary crown whilst yours is being made in the laboratory using a plastic like material or in some cases a metal crown.

BEFORE TREATMENT

The dentist will discuss with you the advantages and disadvantages of having a crown placed on a tooth. The advantages include the protection and restoration of the damaged tooth, together with possible improvements in appearance. However, they typically involve the removal of a further tooth/teeth as part of the process of creating space for the final restoration.

If the tooth still has an intact nerve supply, the health of the nerve can be compromised further by this process and as a result may die and require root- canal treatment to save the tooth if that is deemed possible. Approximately 4 out of 10 teeth die as a result of the stress of decay, fillings and finally crowning over a period of time.

Once a crown has been placed, replacement will be required in the future. Whilst nothing can be guaranteed 100%, a crown will typically give five or more years' service and most a lot more, provided that the crown is not subject to accidental damage or does not require to be cut through in the event of the death of the nerve to allow access for root-canal treatment.

The dentist will also tell you the costs of the treatment and the options available to you.

In complicated cases your dentist may also take impressions for study models before treatment is carried out, especially if your bite is considered complex.

Where teeth are not healthy and root-canal treatment is required to be carried out, a period of typically six months is advised to assess the result of the treatment before proceeding with the placement of the crown. In addition, further reinforcement of the underlying tooth may be required to hold the crown securely in place. Your dentist may have to place one or more post(s) (similar to large pins which fit) into the canals where the nerve(s) used to be and a core which replaces the lost centre of the tooth to allow the crown enough support to be able to be effective.

In the event that neither of these procedures are possible, extraction of the tooth may be the best option and replacement of the missing tooth (on demand) can be provided by a number of options which your dentist will discuss with you.

Your dentist should check your medical history before treatment. You should make him aware of any illnesses or allergies you have and of any drugs you take before treatment.

DURING TREATMENT

You dentist will typically numb up the area around the tooth with local anaesthetic, although in cases where the nerve has been removed this is not always needed.

The tooth will be prepared (shaped) to allow space for the new crown and an impression (mould) of the tooth taken.

A temporary crown made by the dentist during this treatment will be stuck on to protect the tooth during the time the laboratory is making your crown. The shade of the crown will be recorded to ensure that the new crown matches your existing teeth.

Normally up to two weeks later your dentist will fit the new crown on to the tooth with a permanent cement (glue) if the fit, shape and appearance are acceptable. If local anaesthetic was used for the preparation, it will be used for this second visit also.

Your dentist will recommend the best way to care for your crown, including daily cleaning techniques and the aids to achieve this (floss, interdental brushes, mouth rinses, etc.)