**Crowns and Bridges** 

crowns: The outside of each tooth is made of enamel, which is extremely hard. Although teeth are strong and difficult to break, trauma (such as a fall) may chip or break them.

Tooth decay may also severely weaken a tooth, with a high risk that the tooth may fall apart. Root canal treatment, where the pulp of the tooth containing nerves and blood vessels is removed, can also weaken a tooth, especially if it has large fillings. Teeth may also wear down over time.

In these cases, a crown is often the best way to save a tooth and strengthen it. A crown fits over the existing natural tooth and replaces the natural crown, the part of the tooth seen above the gums.

Bridges: Bridges replace one or more missing teeth. They consist of an artificial tooth anchored to the natural teeth on each side of the gap. If a tooth is lost through an accident, or is too badly decayed to save with a crown, a bridge may be the treatment of choice. You can also ask your dentist or prosthodontist about implants, which are another way of replacing missing teeth.

# Talk to your dentist or prosthodontist

This leaflet is a summary of what is known about crowns and bridges. It does not contain all known facts on this subject and is not intended to replace personal advice from your dentist or prosthodontist, If you are not sure about the benefits and risks of crowns and

Crowns and bridges are usually made of porcelain and gold alloy. Porcelain is strong and can be made to match the colour of the natural teeth. It is resistant to staining and can be cleaned if it becomes stained.

Gold alloy is used for its strength, hardness and durability. It is especially useful for molars which must withstand the forces of grinding and crushing. Gold alloy and porcelain are well tolerated by the gum and cheek. An allergic reaction to gold alloy or porcelain is rare.

Teeth have many functions apart from chewing and biting, so missing teeth should be replaced for the following reasons:

- to improve appearance
- to prevent stresses causing damage to other teeth
- to prevent the teeth near the gap from shifting
- to maintain the natural bite
- to improve chewing ability.

All general practitioner dentists are qualified to fit crowns and bridges. A dentist with specialist training in crown and bridge work is called a prosthodontist.

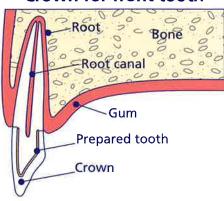
Based on your dental and medical

bridges, your dentist or prosthodontist will be pleased to answer questions or concerns you may have. Give your dentist or prosthodontist your complete medical and dental history, including medicines you have taken or are taking, reactions to medicines (especially antibiotics), any major illnesses, heart problems or surgery. Any of these conditions may affect your treatment.

Dear Dentist or Prosthodontist: After you fill in the information on this sticker, peel it off, and put it on the patient's medical history or card. This will remind you and your patient that this leaflet has been given to the patient. Some practitioners ask their patients to sign the sticker.

Treatment Information Pamphlet
Procedure:
PATIENT'S NAME:
DOCTOR'S NAME:
EDITION NUMBER:DATE: (day)(month)(year)

## Crown for front tooth



# **Bridge**



A crown (top) and a bridge (bottom) are strong and durable replacements for natural teeth.

history, X-ray examinations of your teeth and jaws, and an oral examination, your dentist or prosthodontist will recommend the treatment which is best for you. You will require at least two appointments for preparation and fitting of a crown or bridge. Sometimes a tooth will need a root canal filling and perhaps a post, before crown or bridge treatment.

## TAKING IMPRESSIONS OF TEETH

On your first visit, the dentist or prosthodontist takes an impression of the upper and lower teeth to make a permanent record of their appearance and how they fit together when your jaws are closed (known as "occlusion"). To make an accurate reproduction of your upper and lower teeth, a jaw-shaped tray is filled with a soft gel-like material, pushed onto your teeth and held in place to set for three to five minutes.

YOUR DENTIST OR PROSTHODONTIST

## PREPARATION FOR A CROWN

After the area is numbed with a local anaesthetic, the tooth is shaped using a drill, making it smaller by one to two millimetres. After shaping, another more accurate impression is taken to record changes to the prepared tooth.

The impressions are sent to a dental technician who makes the crown according to specifications set by the dentist or prosthodontist.

To protect the prepared tooth, a temporary crown is attached to the reshaped tooth with temporary cement. As a temporary crown is not as strong as the final crown, you should chew on the opposite side of the mouth and avoid sticky or hard foods.

At the next appointment, the temporary crown is removed; no drilling is needed. The new crown is placed over the reshaped tooth to check that shape and colour match properly. If they do, the crown is cemented to the tooth with dental cement. The dental cement usually sets after one hour and reaches full strength in 24 hours.

Of the tooth, the dental cement and the porcelain of the crown, the cement is the weakest. This helps to protect a tooth because if a strong force is applied to the crowned tooth, the cement usually gives way first. This reduces the risk of the tooth and crown breaking.

After fitting, the crown should feel comfortable and natural in your mouth. When testing your occlusion, your dentist or prosthodontist relies partly on what you say about the feel of your bite, so you should mention any uncomfortable or



strange sensations. Minor adjustments are often needed to achieve comfort.

# PREPARATION FOR A BRIDGE

The steps in preparing and fitting a bridge are similar to those for a crown. The teeth on either side of the gap are shaped by drilling.

These teeth are fitted with crowns which serve as anchors for the replacement tooth that is attached to the framework of the adjacent crowns. The whole piece is then cemented firmly in place.

Preparation for a Bridge

Gum

Natural tooth

Gap

(missing tooth)



Bridge

Hygiene and Care: Crowns and bridges should last for many years. However, there is no lifetime guarantee. As with natural teeth, it depends on good dental hygiene and oral health. Therefore, regular dental check-ups are advisable. Crowns and bridges require regular flossing and brushing, with extra attention around the margins where decay is more likely. Special devices

are available for cleaning under the bridge.

Your dentist or prosthodontist will show you how to clean properly.

including floss threaders and "superfloss"

# POSSIBLE SIDE EFFECTS OF CROWN OR BRIDGE TREATMENT

As with any dental or medical treatment, crown and bridge work has risks. Rare complications, which are not mentioned in the following list, may arise.

#### Breakage of a tooth during preparation

When the affected tooth is evaluated, your dentist or prosthodontist knows whether its structure is strong enough to take a crown. If there is doubt, the existing filling may be replaced or the structure reinforced before shaping the tooth. Problems which occur during preparation can be corrected at the time, before taking the final impression.

#### Infection of the pulp or gums

Infection may affect the teeth in two places:

- o in the soft tissue inside the tooth, called the pulp
- \* in the gums around the base of the teeth.

Whenever enamel is removed, there is a small risk that the underlying pulp may die and become infected. If this occurs, the tooth may need root canal treatment.

To avoid gum disease, additional steps may be needed in your dental hygiene routine, especially to clean completely under the bridge. Poor cleaning may cause "gum recession", where the gum shrinks away from the neck of the tooth.

#### Pain or discomfort

During treatment of a tooth, surrounding gum may be injured and feel tender as the effects of anaesthesia wear off. Any pain should not last beyond two days. If pain persists, contact your dentist or prosthodontist.

#### Altered feeling

If the size of a tooth is changed even slightly, it can have an effect on the way it feels in the mouth, especially when chewing or biting or when the jaws are closed. It is important that you advise your dentist of any uncomfortable or odd feelings at the time of fitting the crown or bridge. If any discomfort continues beyond a few days, inform your dentist, as extra adjustments may be needed.

#### Loose crown or bridge

A correctly fitted crown or bridge should be secure. Contact your dentist if the new work has any movement. A crown may be dislodged by a strong force. If this happens, the crown can be cleaned, disinfected and re-cemented in place.

### Allergic responses

Allergic responses to gold or porcelain are rare. In the case of a suspected allergic response to gold or porcelain, contact your dentist or prosthodontist.

#### Costs of Treatment

You should ask your dentist for an estimate of the costs and consider seeking a second opinion for major work. Some people ask for an estimate which lists all the fees for the complete treatment.

Cost varies according to the extent of treatment. Extra costs may apply if complications occur.

As the treatment and outcome may become different from what was first proposed, the final account may be different from the original estimate. It is best to discuss costs before and during treatment, rather than afterwards.