Bridges – information for patients

What is a bridge and why is it necessary?
A bridge is an artificial restoration that replaces a missing tooth. It is supported by one or two crowns on teeth either side of the space which fit over the remaining part of a prepared tooth.

Are there alternatives?
Alternatives to a bridge are:

- A denture – a removable plastic or metal plate which holds a false tooth in the space. These can be used to replace many missing teeth at once. Dentures are not fixed in place and so must be removed regularly to be cleaned. The benefit of dentures is that they do not involve any removal of tooth structure from adjacent teeth.
- An implant – an implant is a titanium screw placed into the jaw bone which then supports a crown on the top. It is the nearest thing to replacing your own tooth. Implants are more expensive than a bridge or denture, and take much longer to have done. As with dentures, this method does not require any work to be carried out on adjacent teeth.
- Accept the space – many people choose to accept the space left by a missing tooth.

How long does the treatment take?
You will need to have at least two visits. At the first visit, your dental team will prepare the tooth/teeth to support the bridge, take the impressions, make a note of the shade of your tooth (if necessary), and fit the temporary crown(s). At the second visit, your dentist will fit the bridge. There will usually be about 2 weeks between appointments.

Stage 1 – preparing the tooth/teeth
The dentist will give you a local anaesthetic and the preparation work should feel no different from a filling. If the tooth does not have a nerve, and a post crown is being prepared, then you may not need a local anaesthetic.

The dentist will prepare the tooth/teeth to the ideal shape for the crown. This will involve removing a layer of the outer surface, leaving a strong inner core. The amount of the tooth removed will depend on the type of bridge chosen, but will be done as conservatively as possible.

Once the tooth/teeth are shaped, the dentist will take an impression (mould) of the prepared tooth/teeth, one of the opposite jaw and possibly another to show the way you bite together. The impressions will then be given to a dental technician, along with any other information they need.

In root-filled teeth it may be necessary to insert a post into the tooth root before placing a crown. A post gives support and helps the crown to stay in place. The surface of the tooth may be removed down to the level of the gum.
A post can be made of prefabricated stainless steel which the dentist can fit directly into the root canal and then build up around to make a strong “core”, or a custom-made post and core can be constructed by a dental technician to accurately fit the shape of the prepared root canal. The post and core is placed into the root canal and cemented in position, ready for the crown to be attached.

A temporary bridge or crown(s) will be made so that you can use the tooth/teeth while you wait for the bridge to be made. This bridge/crown may be more noticeable but is only temporary. You should avoid eating foods that contain strong colours such as curry, berries and red wine as these can stain the temporary bridge/crown – the permanent bridge will not be affected. It is important that you contact the practice if the temporary bridge/crown comes out as it prevents movement of the teeth either side.

After preparation, the tooth can sometimes feel very sensitive to temperature, especially cold. This should ease once the permanent bridge is placed.

Stage 2 – fitting the bridge

Before cementing the bridge, the dentist will show you how it looks in a mirror. It is vital to say at this stage if there is something you are not happy with, as it can be resolved before the bridge is cemented permanently. When you and your dentist are happy with the fit and appearance of the new bridge, it will be fixed in place with special dental cement or adhesive. The cement forms a seal to hold the bridge in place.

How will the bridge look and feel?

Bridges can be made of a variety of different materials and new materials are continually being introduced. Some of the most popular options are listed below:
Porcelain bonded to metal: a metal base (either precious or non-precious metal) is made and then porcelain is applied in layers over it.
All-ceramic: this modern technique offers a metal-free alternative, which can give the strength of a bonded crown with a cosmetic appearance.
Metal-alloy: gold is one of the oldest filling materials. Today it is used with other metal alloys to increase its strength, which makes it very hardwearing. These are silver or gold in colour.

If a tooth-coloured bridge is chosen, it will be made to match your other teeth as closely as possible. The shade of the surrounding teeth will be recorded, to make sure that the colour looks natural and matches those teeth.

Because the shape of the bridge will be slightly different from the shape of your tooth before it was crowned and filling a space that you may have become use to, you may be aware of it at first. Within a few days it should feel fine, and you will not notice it. The bridge may need some adjustment if your bite does not feel comfortable, and if this is the case, you should ask your dentist to check and adjust it. Rarely, patients have reported muscle soreness or tenderness of the jaw joints (TMJ).

Risks and complications

How long your bridge lasts depends on how well you look after it. Properly cared for bridges should last for many years. Your dentist will be able to tell you how long your bridge may be expected to last.

Although all care and diligence are exercised when preparing teeth for bridges, there are no promises or guarantees of anticipated results or the longevity of the bridge.

Prior to preparing the tooth for a bridge, the dentist will take an x-ray to ensure the tooth/teeth are healthy and strong enough to support the bridge. This allows any other necessary treatment to be carried out before the bridge is fitted. An x-ray will show decay, infection at the base of the root, and some fractures, but is unable to show hairline cracks.

A local anaesthetic will be used during the preparation of the tooth/teeth. In rare instances patients may have a reaction to the anaesthetic. There may be swelling, jaw muscle tenderness or even numbness of the tongue, teeth, lips, jaws and/or facial tissues which is usually temporary, or, rarely, permanent.

You may need to hold your mouth open for long periods of time during the treatment. This may leave your jaw feeling sore or stiff and may make it difficult to open wide for a few days. This will ease with time.

Following preparation of the tooth/teeth, you may experience mild to severe sensitivity. This may be for only a short period of time or for longer. If it persists, please contact the practice so the dentist can review it for you.

Although a crown can make a tooth stronger by replacing missing tooth structure, there are still risks to the tooth. Risks include:

- the nerve of the tooth can die off due to the extent of previous decay or trauma, or the extent of dental work required to restore the tooth – this would result in the need for root canal treatment or extraction of the tooth
- prolonged/severe sensitivity may also require root canal treatment
- one of the supporting teeth may fracture beneath the bridge – this would require removal of the bridge to assess the remaining tooth. It may not be possible to save the tooth, and so the bridge may also be lost.

Bridges can chip or break. Many factors could contribute to this such as chewing excessively hard foods, changes in biting forces, traumatic blows to the mouth etc. Unobservable cracks may develop in the bridge due to these factors, but the breakage may not become apparent until later. Breakage or chipping due to defective materials seldom occurs, but if it does so, it would be soon after fitting. This would be covered by the laboratory's manufacturing guarantee.

After a porcelain+metal bridge has been fitted, you may notice dark lines appearing along the gum edge. This is the metal lining of the crown and may become visible as gums recede. This can sometime be covered over with a cosmetic filling, but you may need to consider a new bridge.

Your teeth can still be affected by dental decay so it is important to keep the bridge just as clean as you would your natural teeth. The bridge itself cannot decay, but decay can start where the edge of the crown joins the tooth. Brush last thing at night and at least one other time during the day with a fluoride toothpaste, and clean in between your teeth with interdental brushes or floss. If decay does occur, you may require further treatment on the tooth, a new crown, or possibly extraction.

Food packing can occur under a bridge – this may be unavoidable and due to the shape of your gum. Your dentist will advise you how to keep the area clean.

It is your responsibility to seek advice from the dentist should you experience any problems.

By undergoing the treatment, you accept the risks mentioned above, possible unsuccessful results or failure of the bridge.