# Filling in the gaps



Missing teeth can be one of the most obvious and embarrassing problems for many people. When it comes to deciding on how to fill the gaps, you have a number of choices available. It is important that understand each option and discuss the long term viability of each choice before you proceed with your treatment.

The options you may wish to consider include:-

- Implants
- Bridges
- Partial dentures
- Do nothing

#### **IMPLANTS**

# What are they?

Implants are a long term solution to missing teeth. They involving placing a titanium screw to act as an artificial root into the mouth and attaching a crown that is designed to exactly match your natural teeth. This procedure is done using 'the wand' local anaesthetic and most patients experience little or no discomfort either during or after the procedure. Implants are a fantastic option for people who care about their smile and want a long term alternative to plates and dentures. Implants are designed to act as a "natural" tooth. The titanium screw replaces the root of the tooth and the crown replaces the tooth itself. They are fixed in place and are not easily removable. Once in place, an implant should last for life providing you look after it and have it checked regularly.

# How are they placed?

The titanium implant is screwed into the jaw bone under local anaesthetic, so you won't feel any discomfort during the procedure. In most cases the gum is closed over so you can't see the implant. The jaw bone takes 16-24 weeks to grow around the implant and stabilise it in place. Once the implant is stable and has integrated into the bone, the implant is exposed and an abutment (joining piece) is placed onto the implant. The crown or false tooth is then attached.

#### Can anybody have an implant?

Implants are generally suitable for anybody, however your dentist will require several things before the implant can be placed. There must be sufficient bone quality and quantity present in which to place the implant. This is determined with an i-CAT scan. Severe periodontal disease is one condition which can cause bone loss and make an implant unsuitable. The surrounding teeth and gums must also be healthy and free from any infection. If there is any infection present, your dentist may recommend delaying the procedure until this has been treated. Infection significantly reduces the chance of the implant integrating successfully. Ideally you should not smoke. Smoking increases the chance of post procedure infection and delayed healing time. Some medical conditions such as diabetes can also delay healing time and increase the risk of the implant failing.

#### Are all implants the same?

No. There are a number of different brands and shapes of implants available. Your dentist will determine the most suitable type of implant based on the information they obtain from your i-CAT scan. All implants that we use are made from a surgical grade titanium and have passed strin-

gent guidelines before they are available for use in Australia. We are unable to guarantee the quality or safety of implants that are placed overseas.

## Do implants always work?

In most cases, yes. However as with any medical or dental treatment, there is always a slight risk that it may not work. Implants fail in about 5% of cases and this is usually related to the implant not integrating into the bone and so not becoming stable. If this occurs, it may be possible to repeat the procedure using a larger implant, or to graft some bone into the site to increase the amount of bone present. If an implant fails, it is usually not the fault of your dentist, it is an unfortunate risk associated with any treatment.

## **BRIDGES**

## What is a bridge?

A bridge is a "false" tooth attached to two anchor points at either side of the gap. It is generally made from ceramic and is designed to match the shape and color of your existing teeth. The bridge can span one or more missing spaces, however it relies on the anchor teeth being sound and stable. In most cases, the bridge unit will look like your own natural teeth. You won't be able to floss between the "false" tooth and the anchor points because they are joined together. Hygiene around the bridge is particularly important, so we will teach you how to floss under the bridge and keep the surrounding gums healthy.

## How long will it last?

A well made bridge should last you 10-15 years providing you look after it. Regular preventive care appointments are necessary to ensure that the anchor teeth are sound, free from decay and stable and that the gums are healthy. Your bridge will never be as strong as your own natural teeth and it can become damaged if excessive pressure and force is applied to it. We make every effort to protect the bridge by ensuring that your occlusion (they way your teeth fit together) is correct, however your occlusion can change over time through normal wear, grinding, loss of other teeth or dental treatment. We will check your occlusion every 6 months at your preventive care appointments to make sure nothing has changed. Occasionally, a bridge can come loose and this is usually easily fixed by re-cementing the bridge to the anchor teeth again. If you don't look after your bridge, it has an increased chance of failing.

# Are all bridges the same?

No. There are a number of different "styles" of bridges and we will recommend the option that is most suitable for your situation.

#### **PARTIAL DENTURES**

# What is a partial denture?

A partial denture replaces several teeth, whereas a full denture replaces all the teeth in an upper and/or lower jaw. Partial dentures are a low cost way of replacing a missing tooth or teeth. They are often done as a temporary measure while patients are waiting for an implant to integrate with the bone, or for economic reasons i.e. to reduce expense where a permanent tooth replacement is required.

#### How do partial dentures hold onto the teeth?

The partial denture is made of a plastic or metal base which covers the gum around the inside of the teeth. The actual false tooth is adhered chemically to the denture base and the base in turn is attached to the teeth via metal clips and wires.

#### What problems are encountered with partial dentures?

The partial denture tends to be a frustrating and difficult part of modern dentistry. They can be uncomfortable and difficult for some patients to accept. It is very hard to predict the way in which the patient will feel after they are given a new partial denture. Some patients take to them readily; others detest them because they feel like a foreign object in their mouth. Hopefully, you only have to endure your partial denture for six months while waiting for your implants. If your partial denture is of the chrome-cobalt type (metal), it should be a lot more comfortable, accurate and less bulky than an acrylic (plastic) one. You may find that your partial denture is sufficiently comfortable for you as a long term solution to replacing missing teeth. Outlined below are come of the problems people experience with partial dentures.

- The gum and bone underneath the denture change with time This leads to an uneven foundation developing as time goes by and it is particularly noticeable in the first 3-6 months after the extraction of the tooth or teeth. Because the top of the ridge resorbs more than the side of the ridge or the palate, biting pressures lead to stresses in the plate, which may (in plastic dentures) result in the plate or the base developing a hairline crack and eventually cracking in half.
- Retention It is difficult to get the partial dentures to stay in adequately without providing unsightly metal clips holding on to several teeth. Often these teeth and these clips are in the area exposed when you smile. There is an alternative whereby the un-aesthetic metal clips can be limited to the back teeth and special invisible clips can be made on the inside of your teeth but this requires crowns or the addition of temporary or permanent filling material to the sides of your premolars, and obviously involves additional expense.
- Matching tooth color Denture teeth only come in a certain number of colors whereas natural teeth come in an infinite number of colors. It is distinctly possible that your denture teeth will not match your surrounding teeth perfectly and you may have to accept a degree of miss-match.
- Reduced sense of taste Because most top plates cover most of the palate the sense of taste is adversely affected.
- Interference with the bite Where the wire clasps cross from the inside of the mouth over the top of the teeth to engage the outside of the tooth, there is potential for interference to the normal tooth meshing pattern. You cannot simply grind away the metal or your denture will fall out, so you may have to accept temporary discomfort or have a small amount of your tooth enamel removed.
- Dentures become loose with time The metal clasps tend to lose their grasp on the tooth with time due to the metallurgy of the wire, thus allowing the denture to become loose and cause embarrassment. On the other hand, clips which are tightened too much cause pain in the teeth. You will need to have your clips tightened from time to time to overcome this problem.
- Gum disease Partial dentures are sometimes known colloquially in the profession as "gum strippers". This is because as the patient chews on them, the plastic base and wire clips drive the gum down the side of the tooth. This does not always happen and depends on individual circumstances. Apart from the issue of gum stripping, partial dentures can increase the probability of gum disease due to the fact that they remove the natural flushing action of the saliva and the cleaning action of the tongue. They can trap plaque and food and therefore should be removed and cleaned after every meal or snack. Even with meticulous oral hygiene, patients who wear partial dentures for long periods of time tend to suffer more gum disease and bad breath.
- Effect on supporting teeth The partial denture transmits the force of chewing not only to the gums but also to the remaining teeth. These teeth are often barely able to support themselves let alone do double the work. As a result, partial dentures are well known to hasten the demise of remaining fragile teeth and turn solid teeth into loose ones.

- Mouth feel and phonetics Patients who have bulky plates covering the roof of their mouths often initially suffer from lisps and difficulty in pronouncing words such as "this" or "that". This is because the tongue is programmed to meet the palate at a certain point in space and 2 mm of plastic causes an upset to the established patterns of speech. The plastic cannot simply be made thinner because it will reduce the strength and lead to more breakages. Hopefully, your tongue will retrain after a few weeks and speech will become relatively normal. Many patients also complain of the bulky feeling in their mouth and you should be prepared for this. Many partial dentures are made, then worn for a week or two and never worn again as a result of this discomfort.
- Springiness of the bite Because the false teeth rest partially on the gum, which is a soft compressible tissue, they tend to spring up and down relative to your natural teeth. This may give you some initial discomfort. Most people usually get used to this after a while.

#### **DO NOTHING**

Doing nothing and leaving the space unfilled is an option, however it does have some long term implications that you need to be aware of.

Most people can function quite well with one missing tooth. At times, chewing food can be more difficult and sharp foods such as potato chips can cause discomfort to the gums. If the missing tooth is at the front of the month or in the smile line, cosmetic concerns are often more of an issue than function concerns.

Where there are a number of large back teeth missing, the function of the teeth is compromised. Front teeth are not designed to chew food and become worn and damaged if they are required to do this over a period of time. The occlusion, or the way your teeth fit together is also affected by missing teeth. Again, significant damage to the front teeth is common in this situation. Where a number of large back teeth are missing, "doing nothing" is not an advisable option because of the impact it has on your remaining teeth.

When a tooth is missing, the adjacent teeth often move or tip into the space. This affects both the function and appearance of the tooth and in many cases, the tooth can fracture due to the uneven forces being placed on it during chewing. If the tooth fractures, it is likely that it would also need to be removed. The opposing tooth can also "super-erupt" or grow longer because it does not have anything to bit against. This can create both functional and cosmetic concerns. If you are considering having an implant or a bridge placed in the future, tipping or super-eruption may make this process more difficult.

So, as you can see there are a lot of different things to consider when you are deciding how to "fill the gap". We encourage you to discuss all of these options carefully so you can make an educated choice that will provide you with a comfortable, functional and cosmetically pleasing result.