

INFORMATION FOR PATIENTS

Dental Implants

What is a dental implant?

A dental implant is essentially a substitute for a natural root and commonly it is screw or cylinder shaped. Almost all dental implants are made from titanium and are placed into carefully drilled sockets at the precise location of the intended tooth. The main aim during placement of any implant is to achieve immediate close contact with the surrounding bone. This creates an initial stability, which over time is steadily enhanced by further growth of bone into the microscopic roughness on the implant surface.

In order to support replacement teeth, dental implants normally have some form of internal screw thread or post space that allows a variety of components to be fitted. Once fitted, these components provide the foundation for long-term support of crowns, bridges or dentures.

Can implants always be used to replace missing teeth?

It depends on the condition of the bone in your jaw. Your surgeon will arrange for a number of special tests to find out the amount of bone still there. If there is not enough, or if it isn't healthy enough, it may not be possible to place implants without grafting bone into the area first.

How long will implants last?

Once the implants and surrounding soft tissues are seen to be healthy and the new teeth comfortable and correctly adjusted, it is the quality of your home care and willingness to present for regular maintenance reviews that will have most influence on how long your implants will last. Well-maintained implants placed into adequate bone can be

expected to last for many years. You would expect conventional crowns, bridges and fillings to need occasional repairs or replacements during their lifetime. Implant-supported teeth will have similar maintenance requirements.

How many teeth can be supported by implants?

If you are missing just one natural tooth, then one implant is normally all that will be needed to provide a replacement. Larger spaces created by two, three or more missing teeth do not necessarily need one implant per tooth, however the exact number of implants will depend upon the quality and volume of bone at each potential implant site.

What happens during the placement of a dental implant?

Treatment is normally divided into two or three stages, each of which may involve several visits to your dentist.

Pre-operative assessment

Before implants can be placed, X-rays and impressions of your mouth will be needed. These allow your surgeon to plan the best way to treat you.

Surgical treatment

The next stage of your treatment is to insert the implants. This is normally done under local anaesthetic (an injection which makes the area where we are working numb) by lifting the gum away from the underlying bone, then gently and carefully drilling into the jaw bone. The implant is inserted into the bone and the gum replaced and held together with some stitches. Following insertion, some types of implant will stick out through the gum, whilst other types will be buried underneath the gum. The implants will usually be left for at least three months before they are used to support replacement teeth. Implants buried under the gum will require a second small surgical procedure to expose them before they can be used.

Restorative treatment

You will need a number of appointments to make your crowns, bridges or denture. This will include taking impressions and checking the fit of the parts used to make your replacement teeth. In total, treatment could extend over six to twelve months.

What are the risks?

There is a small risk that the implants may not fuse properly with the bone in your mouth and so cannot be used. The risk is higher in certain individuals, particularly those who smoke, and you will be advised if the risk of failure is higher than normal in your case. Implant placement involves surgery in your mouth and so may be followed by some soreness, swelling, bleeding or bruising. Any discomfort is usually controlled with simple painkillers (e.g paracetamol and ibuprofen) and should only last a few days. It is possible for parts of your implants to loosen or wear out with time. This can lead to failure of the implant, or the restoration on the implant, if not treated quickly.

If you do not have enough bone what can be done?

For some people, bone loss after the removal or loss of teeth leaves them without enough to secure an implant. In this case there are a number of options which may be suitable and can be discussed with your implant surgeon.

- **Sinus Augmentation:** In the upper jaw above the back teeth, it is possible to increase the height of bone available by creating new bone in the sinus. This procedure is called a 'sinus augmentation'.
- **Bone grafting:** There are many ways in which bone can be added to, however one simple concept is to take a piece of bone from somewhere else and secure it as an 'onlay graft' to a deficient area. The new piece of bone will slowly join to the underlying region and when healed and mature, an implant can be placed in a more favourable position.