

## What is informed Consent?



This is the process whereby you sanction elective treatment after you understand why it is suggested and how it will be carried out. The information and explanations in this document is designed to help you make a decision that is well thought out and with your full understanding of potential outcomes. Please take the time to read through this document carefully and do not hesitate to contact us if you have any further questions or require more information.

It is the responsibility of **Northmead Dental** to provide every patient with enough information so patients understand the extent of the problem, benefits of treatment, risks of treatment, limitation of treatment, treatment alternatives, consequences of no treatment.

## Dental Implants and their uses

### What is an implant?

A dental implant is essentially a replacement of the root of a tooth. It is usually made of titanium or titanium alloy. Various useful attachments can then be selected for placement on implants. These include crowns for a single tooth replacement, bridges to replace a few missing teeth or even a full set of teeth (in one or both jaws). Implants may also be used to attach removable dentures to improve stability.

The titanium rod is usually shaped like a screw. Once it is placed into the jaw bone it “osseointegrates” or fuses with bone over a period of several months. There are limits on how much pressure the implant can take during this phase and it may not be strong enough to support the artificial tooth/teeth, so there is often a period where a temporary solution is required.



Implants have advantages over many traditional forms of teeth replacement. The restorations built on them can look, feel and function like normal teeth. Implants are self-supporting and so other teeth are less likely to be overloaded or damaged. If a tooth is removed from the jaw bone, healing occurs and gums tend to shrink away in the extraction area. If placed early in the same site, implants even help to retain the bone and gum just like a tooth does. It is not usually necessary to plan an implant to replace every missing tooth.

## Are Implants safe and how long do they last?

Implants are well-established, tried and tested. There is a wealth of scientific evidence and clinical experience spanning over 40 years to support recommending implants as patient friendly, biologically compatible devices. Implants are well tolerated and once integrated in the body, they are expected to last for 15 years or more.

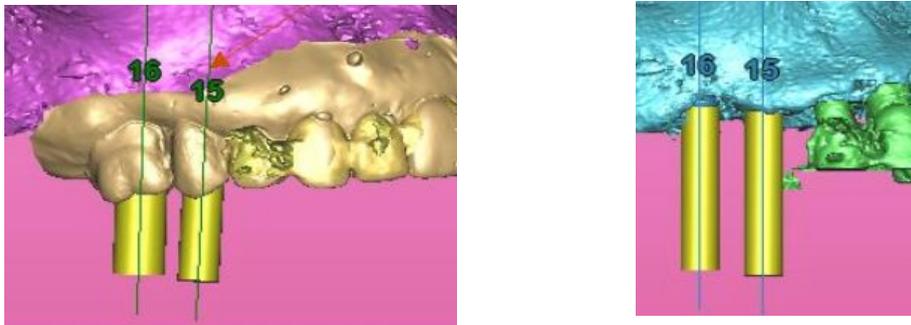
## Can an implant fail?

**Yes, an implant can fail!** Infrequently implants can fail due to infection. A strict surgical protocol and post-operative hygiene program is therefore required. Like natural teeth, implants can also fail due to “gum disease” and so they need lifelong monitoring and professional cleaning. There are also certain environmental factors, medical conditions and medications which predispose to failure. These can include poor oral hygiene, uncontrolled diabetes, bisphosphonate drugs, smoking and habits such as severe clenching and grinding.

## Is there a guarantee in case the implant fails?

As with any surgery, the utmost care will be given to the surgery and post-operative care. But it is impossible to predict a 100% success rate as with anything in the health industry. **No guarantee can be given.** If an implant fails and the patient wishes to have it replaced, it may be done but at an additional cost to the patient.

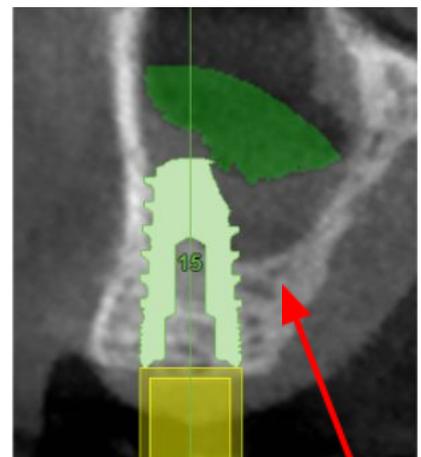
## What are the steps for implant placement and is it suitable for me?



When replacing lost or missing teeth we first decide where the replacement teeth need to be for best function and aesthetics. The implant treatment will always be driven by where the teeth need to be!

We will take study models and a cone beam x-ray. The cone beam x-ray gives a 3D view of the site that requires the implant which allows us to determine if there is enough bone structure to support an implant or whether it will need some type of bone grafting or sinus elevation.

For example, the image to the right shows the cross-section of the upper right jaw and shows that the implant will reach into the sinus. A sinus graft is required for this particular patient.



With all this information we will be able to give an exact quote a detailed treatment plan.

### Computer Guided Implant surgery:

Once the patient has given the go ahead a surgical guide is constructed. These surgical guides or stents enable us to position the implant with incredible accuracy. It eliminates human error and facilitates ease of implant placement.



### Implant componentry:

Depending on where the implant is placed and the type of bone, the dentist will determine whether the implant is covered with a **cover screw** and then the gum stitched over it to let it heal. If this is the case, the implant is uncovered 4-6 months later and a **healing cap** is placed for several weeks to allow the tissue to settle nicely around this cap.



If the bone is good at surgery, a healing cap will be placed right away. 4 months later the crown will be placed.

If the implant is in the smile line, it may be necessary to place a temporary crown or type of temporary denture.

## Implant Complications

### Short term post-surgical problems:

All operations involve some degree of post-operative pain, swelling and on rare occasion bleeding and infective complications. The surgical protocol and medications prescribed are aimed at minimising these effects. Post-operative swelling usually subsides after 2 to 3 days. If swelling or pain should persist after the 3<sup>rd</sup> day, it is recommended that you contact us.

### Bone loss

In some people the placement of implants may be followed by a very moderate amount of early bone loss around the implant neck. Sometimes the implant may need to be removed or grafted.

### Loss or damage of the prostheses

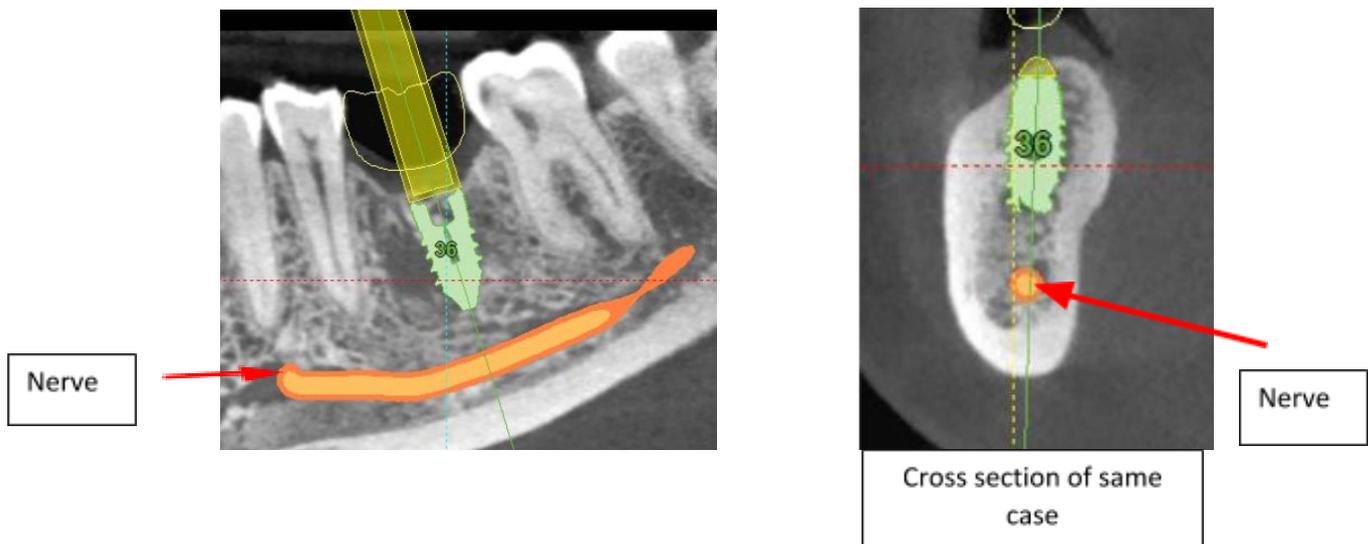
The prosthetic crown may chip or the abutment could become loose. The risk of this occurring varies with the load placed on the prosthesis and also with different designs of prosthesis.

### Perforation of the nasal or sinus lining

Although great care is taken to avoid this problem, during surgery to the upper jaw, the sinus cavity can sometimes be perforated and this might result in some bleeding from the nose. This is usually self-limiting and does not cause any long-term problems. On rare occasions the area above the implant can get infected if the implant protrudes into the sinus space.

### Nerve Injury

Generally, we avoid placing implants close to the nerve. As seen in the cone beam image here, careful treatment planning decreases the risk of nerve damage. However, there is always a risk. Nerve damage can cause numbness, or loss of sensation in the gums, cheeks, lips, chin, tongue and around the lower and upper jaws. If a nerve is injured it will usually heal. Sometimes this may take up to 18 months. In rare cases, the nerve may not heal completely and numbness, altered sensation or even discomfort could be permanent. It is important that you are aware of the degree of risk as assessed by your dentist.



### Final restoration of your implant:

The final restoration is usually made after the implant has integrated in the bone and is stable. This may take up to 4-6 months. During the healing period a temporary false tooth may be needed. This temporary tooth may need to be modified as healing and shrinkage occurs in order to achieve the best final outcome. However, if it is not in the smile zone, it is best left alone to allow for good healing.

### Maintenance of your implant:

Bacteria in plaque and tartar (calculus) may develop around implant crowns in the same way as with teeth. Although implants cannot decay, the build up of bacteria can cause an infection of the gum and bone around them, as with teeth. If left unchecked this can lead to unsightly gum shrinkage around the implant or even lead to loss of the implant. A healthy implant has no movement whatsoever.

Daily oral hygiene and regular dental check-ups are vital to ensure long term survival and success of the implant retained tooth. You will be shown how to care for your implant and taken through maintenance at the time of implant restoration and it is your responsibility to comply with maintenance requirements.

## Alternatives to implants

Part of the informed consent process includes understanding options for treatment.

Treatment option number 1 can always be **no treatment at all**.

Tooth replacement can include removable or fixed options:

### (1) Removable options:

- Partial dentures consisting of one or more teeth attached to a framework which clips around remaining teeth. This is easily removed for cleaning. Partial dentures are a very viable removable option for a few missing teeth. If all your teeth are missing, then a complete denture is your best removable option.

### (2) Fixed options:

- A bridge is an example of a fixed option whereby a missing tooth or teeth are fixed onto adjacent teeth. The preparation of the bridge requires reductions of tooth structure of the supporting teeth
- Implants are a fixed option alternative to bridges and enable fixed replacement of teeth without necessarily involving teeth for support.

It is important that you understand the pros and cons of all the alternatives as applied to your particular situation.

## Implant Failure and Replacement Warranty

If your implant(s) should fail, an attempt will be made to identify an underlying reason. We will also check if an appropriate maintenance schedule has been followed. There are also certain medical conditions and medications that increase risk and if you have such increased risk you will be advised of this during the consenting process.

If you should require treatment of an implant failure, it is likely that you may incur cost for such care.