



Dental Implants

INFORMATION SHEET

Using implants

You may have several available options for replacing one or more missing teeth. Teeth can be replaced with one or more fixed or removable dentures. Dental implants are basically “artificial roots” which can be used for attaching a permanent crown. A permanent crown screwed or cemented to an implant is the option that looks most like a natural tooth.

Another implant restoration option is a removable partial denture held in place with a retaining bar (prefabricated or customized), attached to implant abutments.

Your dentist can talk to you about replacement options that are right for you.



What is a dental implant?

Dental implants are small cylinders (screws) inserted into the jawbone to replace missing roots.

There are several types of implants, with different morphological characteristics. Most scientific studies cover the use of titanium, a biocompatible metal which is highly compatible with human bone.

Specifically, once the implant has been inserted into the bone, it attaches to it. This biological phenomenon, called osseointegration (bone growing around the implant), establishes a solid, fixed base for holding a restoration. Implants can be used for the upper or lower jaw.

Implant-supported devices have been used for over 40 years. Patients of all ages have chosen dental implants as a solution for replacing a single tooth, several or all their teeth. Even though an implant is considered a permanent solution for replacing missing teeth, because it can last a very long time, it is not possible to predict its exact lifespan. In some cases, the implant may need to be removed or replaced due to changes in the supporting tissue.

What steps are involved in treatment?

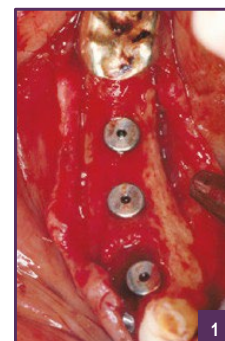
Rehabilitation using an implant is a treatment that is done over several months, depending on the complexity. There are three phases.

The first phase is the preparatory diagnosis, which involves a complete exam of the mouth to detect and correct any problems. It is very important that residual teeth and gums be healthy with no infection before placement of an implant.

The exam also includes taking x-rays and impressions of your mouth, so the shape and bone density of the toothless ridge (gum) can be analyzed to plan the shape of future restorations. Then a treatment plan is determined and appropriate implants are selected.

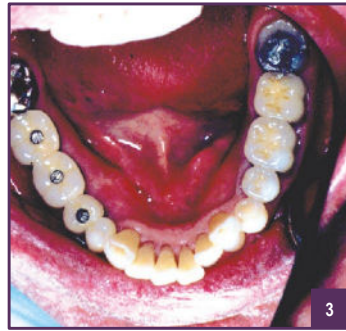
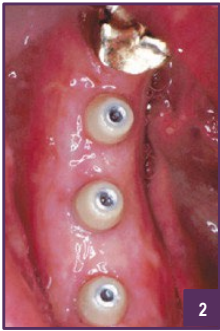
The second phase is surgery, which consists of inserting implants into the jawbone. This may require one or two procedures.

If the surgery is divided into two procedures, the first involves inserting the implants into the jawbone and the second is to expose the implants and add abutments to hold the restorations (Fig. 1).



When a single surgery is planned, placement of the implants and abutments is done in a single procedure. In that case, the gum will scar around the implants, as osseointegration occurs. Several factors are considered when choosing the most appropriate approach for your oral health.

The third phase is the prosthetic/rehabilitation phase and consists of designing the restorations planned in the first treatment phase. Depending on your situation, a crown, bridge or dentures will be attached to the implants. After the implants have healed fully, the restorations can be applied (Fig. 2). In the final step, the restorations are screwed or cemented into the implants (Fig. 3).



What are the risks and complications associated with implants?

Use of implants to replace missing teeth is a treatment with a high success rate. Nonetheless, certain risks are associated with this treatment and sometimes there may be complications during or after treatment.

Your dentist will talk to you about the specific risks that may be related to your health.

Associated risks and potential complications

- Swelling, which is a normal reaction after any surgical procedure; the extent of swelling depends on the scope of the surgery. There is increased swelling in the first 48 hours after surgery and then the swelling subsides.
- Bruising (yellow and blue colouring) on the skin may occur around the surgical site. Discolouration is temporary and will go away after 7-10 days.
- Mild-to-moderate pain is common after implant surgery and may last several days. It is common to take pain-relief medication; your dentist will prescribe this for you.

- Slight bleeding is normal during the first 24-48 hours after oral surgery.
- Infection at the surgical site is relatively rare after an implant placement procedure but this may occur. Increased swelling after 48 hours, a fever or increased pain may be symptoms of infection.
- Integration failure (an implant that has not integrated into the bone) is a complication which may occur in about 5% of cases. This does not mean that the implant has been rejected, but rather that the implant has failed to attach to the bone. If that occurs, the non-integrated implant will have to be removed. In most cases, it can be replaced with a new implant. However, the complication may mean that the treatment will take longer.

Depending on the placement of the implants and, more specifically, the anatomy of the jaws and position of existing teeth, other complications are possible:

- Risk of damaging the roots of teeth adjacent to the implant site.
- There may be a loss or change of feeling in the chin or tongue if an implant is placed near a nerve. This presents as numbness or tingling of the lower lip. This complication is usually temporary but may be permanent in some cases.
- Implants placed in the back (posterior) area of the upper jaw may lead to certain complications, including sinusitis.
- In cases of major bone atrophy (very thin bone), a jaw fracture may occur when sites are being prepared for the implants. This complication will require the use of a splint to consolidate the fracture.

Is any special care required once the implants are in place?

Dental implants replace lost teeth and, just like teeth, they need to be taken care of. Patients must make sure they practise very good oral hygiene and see the dentist regularly. Your dentist can check the condition of the implants and descale them. Like natural teeth, implants may be affected by periodontal disease, even after integration into the jawbone. This disease, which presents as loss of bone supporting the teeth and implants, can lead to implant loss. Therefore, proper implant care is very important.

I gave this information sheet to patient (name): _____

Date: _____

Dentist's signature: _____