IMPLANT TREATMENT: FREQUENTLY ASKED QUESTIONS

WHAT ARE DENTAL IMPLANTS?

Dental implants are titanium rods that are surgically placed in your jaw bone which will subsequently support your missing tooth. The titanium surface on the implant are biologically compatible with living tissue (bone) and over time becomes “joined” or integrated with bone forming a permanent fixture in your jaw.

The artificial tooth is then attached to the implant fixture either by a screw or by cementing on to a connecting abutment.

We have been providing implant therapy since 1988 and have accumulated a lot of experience in this field of dentistry. Essentially the provision of implant therapy encompasses several specialty areas of dentistry and these are Oral Surgery & Periodontics, Oral & Maxillofacial radiography, Restorative Dentistry and Dental Technology. In all cases of implant therapy, a team approach is adopted.

Implants are very versatile and can replace a single tooth or they can be joined to each other to provide more substantial support from 2 to more teeth. Indeed we can replace the bulk of usable teeth almost returning you back to “normal”. Obviously nothing can totally replace a natural tooth but implants can come close provided all care is taken to manage the situation.

WHAT ARE THE STAGES IN IMPLANT THERAPY?

From our experience of over 20 years the following protocol is currently used to provide the most predictable result. For the single tooth

1. Extraction of the failed tooth and possible socket preservation bone grafting.
2. Provision of temporary denture if necessary
3. The socket is allowed to heal for 6 weeks
4. Impressions are taken to prepare a radiographic stent
5. CT Dentascan or Cone Beam CT is taken either at SKG Bunbury or at Envision (Perth). This is usually taken 8-10 weeks after the extraction. The patient wears the radiographic stent that has been prepared previously. The volumetric information obtained from the 3-D scans are used to ensure that we have adequate bone to place an implant and to also provide us with sufficient information as to the relative position of nerves in the upper and lower jaws and also the position of the maxillary and nasal sinuses in the upper jaw.
6. Once the CT data has been received, implant surgical treatment planning is done using SimPlant software to plan the surgery. With this software we can do virtual surgery so that any possible complications can be prepared for. Also at this stage we will have a good idea of the complexity of the surgery.
Complex surgery where the implant is close to anatomical structures that may pose a safety issue for the patient, will be done by our Oral & Maxillofacial Surgeon. (Dr Mario Alberghini) in Perth. This will all be discussed with you at a separate consultation appointment where we will finalize our management plan.

7. In most cases, stage one surgery is done usually under Local anaesthetic. At the patient’s request we can also perform the surgery under IV sedation administered by a qualified medical doctor. This is a comfortable way for anxious patients where you will feel very relaxed during surgery. In many cases you will have amnesia and have little to no recollection of the procedure.

8. A healing phase of 6 – 8 weeks is allowed during which time you will continue to wear your removable prosthesis.

9. The prosthetic phase is a 2 stage procedure,
   i. Stage 1 is to construct a provisional (temporary) restoration to allow the gum tissue to heal around a tooth structure and to allow the bone to be “progressively” loaded with a “plastic” (softer) structure to allow for optimal healing.
   ii. Stage 2 is the final replacement of the provisional crown with the definitive crown usually done 2-3 months after wearing the provisional or at the patient’s leisure.
   iii. In the posterior region where gum aesthetics is not so critical, we could bypass the provisional stage thus saving you some time and money. You can discuss this with your dentist should you wish to bypass the provisional stage.

10. At Stage 1 prosthetic phase, we will test the implant using Resonant Frequency Analysis. This measures the stiffness of the implant and gives us an indication as to how well the bone has healed around the implant. The value derived from the analysis is called the Implant Stability Quotient (ISQ). Based on research, a reasonable ISQ value (ranging from 50-80) would indicate that the implant is ready to be loaded. At this stage an impression is made to commence fabrication of the provisional restoration. The laboratory construction of the implant provisional or definitive crown is approximately 12-15 working days.
    For hybrid bridges and complex bridges where more steps are required to fabricate the prostheses, 4-6 weeks is necessary to complete the prosthetic phase.

WHAT OPTIONS ARE THERE WHEN I AM MISSING ALL MY TEETH?

In patients who are totally edentulous (missing all their teeth) there are 3 options that are available to them using implants:
1. Have an implant supported overdenture
   a. This is when we typically place a minimum of 4 implants (for the upper jaw) and 2 implants (for the lower jaw) that will clip on to a removable denture. This is the cheapest option and will give you good retention for your dentures. By being removable, cleaning is easy and should repairs be required, it can be easily done.
i. Patient love the overdenture option for the upper because they no longer have their palate covered and feel secure that their dentures are tightly held into place.

ii. In the case of the lower jaw, the secured denture resists movement by the tongue, lips and cheeks reducing soreness under the dentures.

2. Have an implant supported hybrid bridge:
   a. A hybrid bridge is basically having a denture attached by screws to the implants. These work extremely well for the lower jaw where the patients no longer have to remove the denture. Whilst it can be done for the upper jaw, cleaning can be an issue and may present a problem to the patient. As the patient ages and become less dexterous to clean the denture, gum disease can occur around the implants leading to infection and eventual loss of the implant.

3. Have an implant supported all porcelain or porcelain fused to metal bridges
   a. This is when we have custom made teeth made entirely of porcelain or with a combination of porcelain fused to metal (usually a gold alloy) either screwed to the implants or cemented to them. These are expensive as the technical expertise required to create each tooth individually becomes very costly. Nevertheless it is very comfortable, aesthetically pleasing and can be cleaned easily like natural teeth. This is ideal for the upper jaw if a “fixed” option is chosen.

**WILL I HAVE MUCH PAIN AFTER THE SURGERY?**

There will always be a bit of discomfort after any surgical procedure but in most cases the discomfort can be managed by over the counter pain medication such as Paracetamol (Panadol). Stronger pain killers can be prescribed but in many cases this is not necessary. Usually patients take pain medication for 24-48 hours and taper off after that time. The longest period we have had a patient take pain medication is 6 days. This however is uncommon.

**WILL THERE BE MUCH BRUISING AFTER THE SURGERY?**

There will be minor bruising and depending on the location of surgery, your lips may feel swollen and tight. The bruising and swollen lip is like having had a punch to the face!(very crudely stated!!) This will settle down after a few days. You can minimize the swelling by using a cold compress after the surgery.

**CAN I GO BACK TO WORK AFTER SURGERY?**

Yes, as long as your work does not include strenuous activity that will cause your blood pressure to go up. This may lead to more swelling and post operative bleeding. Usually you do not need to take time off work for minor surgery involving 1-4 implants.

**CAN I HAVE SOME FOOD AFTER SURGERY?**

Yes, but have a soft diet for the day of surgery. You can go back to a normal diet the next day. Obviously avoid chewing on the side of surgery until you feel comfortable to chew in that region again.
WHEN CAN I START CLEANING MY TEETH AFTER SURGERY?

You must maintain a very high level of oral hygiene before and after implant surgery. You may commence your routine brushing of your teeth the next day after surgery but just take care not to “disturb” the wound which may still be swollen and slightly uncomfortable. You will be provided with a course of antibiotics which you should have started a day before the surgery which you must complete the entire prescribed course. You will also be given some Chlorhexidine gel and a special “ultra soft” toothbrush to help you clean around the implant. You must apply the gel 5-6 times a day around the wound with a cotton bud until you finish the gel.

IS THERE A TIME THAT I WILL BE WITHOUT MY DENTURES?

This usually happens when you have a major grafting procedure done. In this case we will ask you to leave the dentures out for 2 weeks if possible. In many cases, patients take a holiday and..... disappear. Time to read several good books or catch up with chores around the house.

We will reline or rebase your denture soon after that. This will only take a day to do. From then onwards you will always be able to wear your dentures.

I HAVE HEARD THAT IMPLANTS CAN BE PLACED IMMEDIATELY AFTER THE EXTRACTION. IS THIS CORRECT?

Yes, in some cases implants can be placed on the same day as the extraction. Cases that this will work well in are in cases where the tooth has to be removed where there is no discernible infection associated with it

We must also consider the size of the socket. Implants come in certain set diameters and if the socket is much larger than the implant itself, e.g. in molar teeth and in many cases the front tooth, it would be prudent to allow some bone to grow back into the socket before attempting to place an implant immediately into that socket.

I HAVE ALSO HEARD THAT NOT ONLY CAN IMPLANTS CAN BE PLACED IMMEDIATELY AFTER EXTRACTIONS BUT A TOOTH CAN ALSO BE PLACED IMMEDIATELY. IS THIS CORRECT?

Once again, this can occur under certain conditions. The healing of bone around an implant is very much like bone healing around a “fracture”. In the case of bone fracture, your doctor would immobilize the parts either with a plaster cast or by using plates or pins. This is done so that the fracture can heal properly and the immobilization of the broken parts is critical for a successful result. If a tooth is placed immediately on an implant, there is a risk that with everyday eating and chewing that the implant will be subjected to micro movement leading to the failure of the healing bone to integrate successfully with the implant. When this occurs, you will lose the implant and we will have to start all over again. In such cases, it will be costly and time consuming for the patient to pay for the procedure all over again.
When multiple implants are done, especially in the lower jaw, we may be able to do an immediate implant supported temporary bridge as all the implants will be splinted together. Careful planning is required in this case and coordination with the surgeon and dental technician is essential so that the delivery of the prostheses can be done in a timely manner. Please discuss this option with your dentist if this technique appeals to you.

**WILL MY IMPLANT CROWN LOOK NATURAL?**

We will try our very best to make the artificial tooth look as realistic as possible. Photos will be taken, together with a colorimetric evaluation of your adjacent teeth done (using the Shade Vision colorimeter) to obtain the best “matching” color for your tooth/teeth. In some cases, you will need to see our technician to get the best result in his laboratory. There are no additional fees for this service.

What is difficult to predict is what your gums will do around the implant crown. It is possible that with the surgery that the gums may recede slightly around the adjacent teeth and the implant crown itself. The papilla (gum between your teeth) is likely to recede slightly and this may present as a slight cosmetic issue. Obviously we will try everything possible to minimize the recession but at the end of the day, this aspect of implant dentistry is unpredictable. Your dentist will be happy to show you photos of completed cases to show you what you can realistically expect. You must accept that ultimately an implant crown is still an artificial tooth and nothing can match the beauty of a natural tooth, however we will do everything possible to achieve a good result for you.

**THERE ARE MANY SYSTEMS AVAILABLE IN THE MARKET FOR IMPLANTS, WHICH SYSTEM DO YOU USE?**

We choose the implant after we have used our planning software SimPlant. The software allows us to choose the best possible size, length and shape that will fit your existing bony anatomy. We do not subscribe to a “one system fits all” mentality at our practice. As a result we fully stock the Astra system, Noble Biocare Replace and Branemark systems. We have the additional prosthetic tools and parts stocked to restore 3i and Straumann systems. You will find abundant information in the internet on these systems. All the four systems that we support have offices all over the world and have many years of well documented peer reviewed research and documentation behind their products. They are also companies that have invested in a significant amount of money in research and development.

**IF I NEED A BONE GRAFT, WHAT SORT OF GRAFT MATERIAL DO YOU USE?**

In all cases, we will always try to use your own bone (autogenous bone). This is the gold standard. If we need more bone, we will use either Bio Oss which is a “Xeno” graft derived from cows (Bovine bone). Alternatively if you have a problem with animal products, we can use totally artificial synthetic bone such as Bio Active glass particles. Depending on the volume used, we may place a collagen membrane to act as a “band-aid” to hold the graft material into place. Larger block grafts will be done by our surgeon Dr Mario Alberghini.
WILL MY IMPLANT TOOTH/TEETH LAST FOREVER?

Nothing lasts forever. Even for normal crown and bridge procedures, an average realistic lifespan of crowns and bridges is about 12-15 years. It is conceivable that if your health remains good and that you have no gum disease that your implant in your jaws will last your “life time”. The artificial tooth/teeth that we secure to the implant fixture will be subjected to the normal wear and tear of everyday eating and chewing and it is likely that you may need to change the crown and screws probably every 12-15 years.

It is essential that you maintain a high level of personal oral hygiene and attend for your regular dental maintenance appointment every 6 months or at the very least every year.

CHOOSING YOUR IMPLANT TEAM

When choosing your implant dentist it is important to choose professionals who have the experience, have taken time to pursue proper postgraduate (both national and international) training in this field and use technicians that construct these restorations on a daily basis at the highest possible level. Your implant team with our associated specialists have that experience and are happy to provide this exciting and revolutionary treatment to achieve the best possible result for you.