Patient Name

Street Address

City

Postcode

DATE

Dear xxxxx

**RE: YOUR DENTAL IMPLANT TREATMENT**

Following on from our discussions in the surgery I am writing to clarify the details of your proposed dental treatment. As you know, you have asked me to detail the provision of implant work to replace all of the teeth in your Upper/lower jaw.

When you have read and understood this letter, please sign the consent form on the back page of both documents and return one copy to me. Please ensure that you retain the other copy and keep it carefully as it contains information that you may require at a future date.

This information is to help you make an informed decision about having dental implant treatment. You should take as much time as you wish to make the decision in relation to signing the consent form at the end of this letter. You are encouraged to ask any questions and have answers to your satisfaction before you sign the form and consent to treatment being provided.

I apologise for the large amount of information contained in the letter but it is important that you should understand and read it carefully. The first part of the letter describes implants in general terms and the second part clarifies the treatment, which has already been discussed with you, and is specific to yourself.

**GENERAL INFORMATION:**

WHY ARE IMPLANTS NEEDED?

Once teeth are lost, the bone in which they are embedded gradually resorbs because it is no longer required to support the teeth. The teeth and lost bone can often be replaced by removable dentures or fixed bridges to restore appearance, speech and mastication (chewing). As with all man made substitutes for nature’s living tissues, there are drawbacks to artificial appliances. Dentures reduce eating efficiency and can suffer from poor retention. On the other hand, bridges may involve cutting away healthy teeth in order to provide support.

An alternative method of tooth replacement is to insert implants into the jawbone to support the false tooth or teeth. Implants are tooth-root like structures made from commercially pure titanium. Titanium is a biologically compatible material. If successful, implants will become firmly attached or integrated with the bone and act in a similar manner to a tooth root. If an implant is placed immediately or soon after a tooth is extracted, jawbone can often be preserved and its future shrinkage may be prevented. For this reason, in some cases it may be best not to delay the decision to place implants, as bone can resorb over time, which can make the placement of implants more difficult in the future. However, even after considerable bone loss has occurred, it may still be possible to place an implant although additional bone grafting techniques may sometimes be required.

THE PROCEDURE

The condition of the jaws will be assessed for suitability and the treatment planned using x-rays, photographs and models of the teeth. It may be necessary to take a 3-dimensional Cone Beam CT (CBCT) scan to check the amount and position of the available bone. The final decision as to whether or not to proceed with implant placement will be made at the time of surgery and will be determined by the quality and quantity of the jawbone.

In the lower jaw an important nerve that supplies sensation to the lower lip, teeth and skin of the chin runs inside the bone. The x-ray(s) and/or CBCT scan are important in determining the position of this nerve in order to minimise the risk of injury, which can result in altered sensation.

In the upper jaw it is important to ascertain the size and position of the air sinuses and nasal cavities prior to implant insertion. Occasionally the implants may have to be placed slightly into the sinus or nasal cavity. Usually this is not noticeable but there may be a slight nasal discharge with a small amount of temporary bleeding after initial surgery. In some cases, the implants may be placed under the gum and so will not be visible in the mouth immediately after surgery.

TYPE OF IMPLANT PLACEMENT

Implants can be inserted in one of two ways:

1. Immediate insertion - is when the dental implant is placed at the same time that the tooth is removed. The advantages of this approach are a reduction in treatment time and the preservation of bone in the area. Whether or not this approach can be used will depend on the condition of your bone at the time of extraction. If the socket is unsuitable for immediate implant placement, or active acute infection is present, it may be necessary to defer implant placement for three months whilst new healthy bone reforms in the area. A bone graft material may be used to promote the new bone growth.

2. Post immediate dental implant placement - is the insertion of the implant into a region of the mouth where the tooth or teeth have previously been removed or have been missing for some time.

Implant treatment may entail a combination of the above insertion methods and the time required to place them will depend on the number being inserted and their position in the mouth.

TYPE OF ANAESTHETIC

The implant(s) will be placed usually under a local anaesthetic. In some cases intravenous sedation may also be used.

AFTER IMPLANT PLACEMENT

After the procedure there will be some discomfort and swelling. The degree of swelling will depend upon the number of implants placed and whether or not additional surgical procedures were carried out. Occasionally, along with the swelling there may also be slight bruising of the skin overlying the area which will fade over a week. If a patient is a smoker or has a pre-existing medical condition which affects soft tissue healing, the amount of swelling may be greater. The gum tissue in the region where the implants have been placed may change appearance/colour and take on a white appearance for a short time (normally two weeks) after surgery.

After 7-14 days, once the soft tissues have healed sufficiently the stitches may be removed. During this period it may not be possible to wear dentures or temporary restorations. After this stage the implants will usually be left undisturbed for up to six months to attach to the jawbone. During this period the top of the implant may show through the gum slightly and metal may become visible. Although this is normally no cause for concern, should it occur patients should contact the practice to have the area checked.

MAKING THE NEW TEETH

Implants are usually allowed to heal for 4-6 months before impressions are taken. The new teeth are usually ready within 1-2 months of the commencement of the impression stage.

TREATMENT TIMING

The amount of time the treatment will require varies with the degree of difficulty and the amount of work needed. It is important to bear in mind that the teeth have to be made individually to suit your specific requirements and mouth. This type of precision work is very time consuming and cannot be rushed, as it must be of the highest quality. Prior to fitting the finished teeth, a variable number of visits may be necessary to make fine adjustments to the teeth. Therefore, it is important to keep your dentist informed of any travel arrangements or important engagements you may be planning and to give as much notice as possible.

WHAT HAPPENS IF THE IMPLANTS DO NOT TAKE

Fortunately this occurs rarely as potential problems can often be anticipated and discussed with you before treatment starts. Research shows that about 5-10% of implants may fail and although the risk is small, as with any surgical treatment, you must be aware of the possibility. Should an implant fail to take then it is sometimes possible to replace it with a second implant at the same time as the first implant is removed. It will of course be necessary to wait a further six months while the second new implant attaches to the bone. It has been shown that alcohol and tobacco consumption can reduce the rate of success. These habits also have an effect on the rate of healing and may increase the chances of post-operative infection.

AFTER CARE AND MAINTENANCE

It is important to remember that implants are not “Fit and Forget” and that they need the same care and attention as natural teeth. On completion of the treatment it may be necessary for you to attend a number of recall appointments to check the condition of the implant(s) and to adjust the bite if required. After this, regular six monthly appointments should be made as normal for dental check-ups with your usual dentist. Although the gum tissue around the implants is fairly resistant to infection, you should still keep your regular hygiene appointments as a build-up of plaque will cause problems and possible bone loss from around your implants. This could result in their eventual loss. The frequency of hygienist visits will depend on your standard of oral hygiene. Long term maintenance of the implant and crown will be required, as for any other normal crown. Major maintenance may involve the replacement of the crown (not implant) due to wear and tear. Minor maintenance may include the removal of the crown to check the implant abutment and replacement of retention screws as required. These maintenance requirements will incur additional costs above the initial fees.

If you have teeth and implants mixed together it is also very important to maintain the health of the natural teeth. Should the natural teeth become infected or are lost for any reason, the remaining implants may be damaged by the extra pressure caused by the additional workload.

It is also important that you inform the surgery immediately should you detect any mobility or loosening of your implant teeth. Occasionally, the small screws which help to retain the crown become loose due to either heavy or abnormal biting. This is an easy matter to rectify if caught early as it entails retightening the screws and adjusting the bite or removing the cause of the loosening. Failure to attend early will result in possible fracture of the screw or even worse, damage to the implant.

It is essential that we review the implant(s) at least annually. You will need to attend at least once a year for this review. The costs of the annual review are not included in the initial treatment costs. The annual review allows us to monitor the bone and soft tissue health and hence identify any problems early. Failure to attend for annual review may result in the detection of an underlying clinical problem occurring too late for any treatment of the problem to be effective and hence may result in the loss of your implant(s).

**INFORMATION SPECIFIC TO YOUR CASE:**

**Statement of informed consent**

Please carefully read each paragraph below, and having read and understood each section **please initial on the dotted lines** that follow each section.

In signing the form at the end of the letter you are stating that you have read this letter, have understood the consent form and the following sections on your specific proposed treatment. Although it contains medical/dental terms that you may not completely understand on first reading, you have the opportunity to ask questions and have them answered to your satisfaction in order to ensure that you fully understand the information in this letter.

**Your current situation**

xxxxxxx

You have a number of ways in which you could deal with having no teeth in your upper/lower jaw:

1. Leaving the jaw untreated, with no teeth
2. Having a removable denture
3. Having an implant retained fixed bridge
4. Having an implant retained overdenture
5. Having a bridge retained with zygomatic implants

We have discussed all of these options in detail including the benefits, risks, side-effects, likely costs and complications associated with each alternative option. I have shown you photographs of each option so that you could fully understand everything that was being explained to you. We have discussed your specific needs and have established what is important to you personally so that I can emphasise any particular risks that are specifically relevant for your individual circumstances. You have confirmed that you fully understand everything that we have discussed. I have asked you whether there is anything of particular relevance to you that you would wish to know regarding the risks of each treatment option. After consideration, you have stated that you wish to have……

Although we have already discussed all of the treatment options at the practice, in order to ensure that you can remember everything I will explain once more:-

A ***denture*** is a removable appliance that will restore an element of function, speech and appearance at a reasonably low cost. Dentures can also help to support the soft tissues and muscles of your face. This is something that implants are not particularly efficient at, as they simply replace teeth rather than teeth *and* gums. Some patients are happy with such prostheses, whilst others find that a denture may move when chewing and they can be difficult to get used to. Dentures must be removed for cleaning and never worn whilst sleeping at nights. Dentures may affect the sense of taste with some patients.

An ***implant retained overdenture*** is a denture than clips into studs, which are attached to implants. This has the advantage of allowing a firmer retention than a denture alone. These overdentures must still be removed at nights and for cleaning. These overdentures will need periodic maintenance, as the clips wear over time. They may need replacing on average every 5 years. An implant retained overdenture has the same shape as a normal denture, so in the upper jaw there is still a palate and the soft tissues can be bulked out to a degree. They have the same risks of taste and speech disturbance as normal dentures. If a patient has an excessively hard bite or grinds their teeth the denture, clips or studs can fracture.

An ***implant retained fixed bridge*** is not removable. This is a fixed bridge which replaces your lost teeth and is held firmly in place by implants. The bridge is screwed into the implants, which are placed into the jaw bone. The advantages of a fixed implant retained bridge include you not having to remove it, it not needing to cover the palate and better sensation of taste than a denture. Disadvantages include the fact that these bridges may not bulk out the soft tissues of the face as well as a denture, so may cause your lips and cheeks to look more sunken than with a denture. Excessive biting forces or grinding of your teeth may cause these bridges or their retaining screws to fracture. You will need to be very meticulous cleaning these bridges. As they are not removable, cleaning them can be more difficult than with a denture. These bridges are usually one of the most expensive options.

A ***zygomatic implant retained fixed bridge*** is a non-removable bridge that is retained by long implants, which go from the upper jaw into the cheek bone either side of the skull. These are often used as an option for patients with poor amounts of jaw bone in the upper jaw and may negate the need for a bone graft of the jaw or sinus. The general advantages and disadvantages are similar to an implant retained fixed bridge, as described above. The most common complication associated with zygomatic implants is sinusitis. Other complications reported during and after the insertion of zygoma implants include numbness of the skin underneath the eye as a result of nerve damage, fistula formation between the mouth and sinus, and perforation of the orbit. This option may cost about the same as an implant retained fixed bridge. I do not offer this option. If you would like to be assessed for this option, please let me know and I will make the appropriate referral.

Your remaining teeth on the opposite jaw are moderately heavily restored with fillings and crowns. The long-term health of these teeth must be monitored and maintained by your normal dentist. Should teeth become damaged or lost elsewhere in your mouth, this could change your bite and could adversely affect implants, in some cases resulting in their loss. Similarly, the health of your gums must be checked and maintained in the long-term as evidence shows that gum disease can affect the success rate of the implants.

**Initials....................**

**Details of the appointments**

Xxxx

The implant sites are prepared with a surgical drill. The implants are then screwed in.

If the implants achieve a high degree of tightness (insertion torque), I will place a healing abutment onto each one and will begin to restore them after 4-6 months. A healing abutment is a small, round metal cap which is designed to protrude through the gum by 1-2mm.

If the implants achieve a lower degree of tightness, it may be necessary to attach a cover screw and to sew the gums back together over the top of the implants. The implants would then be allowed to heal for a longer period of time.

The degree of tightness that we achieve is determined by how hard your bone is. This can only be judged by me during the surgery itself. In some cases the bone may be so soft that we are not able to gain firm enough fixation for an implant and hence the implant surgery will need to be abandoned.

As long as the bone is firm enough, the implants will then be placed and left, for the period described above, to integrate with the bone. If a covering screw is placed onto any of them, a second surgical procedure will be required to expose the implant and check that it has taken.

It is difficult to predict the amount of swelling and discomfort that will occur following the procedure as it varies from person to person. Some patients get very little swelling or discomfort whilst others develop sore, swollen gums, lips and/or cheeks for up to two weeks. To be on the safe side, please allow yourself sufficient recovery time and do not commit yourself to important engagements, work commitments or holidays for at least two weeks after surgery.

The gum will be closed with stitches, which will be removed around 2 weeks later

The implants are then reviewed at the 1 month, 3 month and the 6 month stages. When the implants are ready to be loaded we will start to construct the prosthesis. Constructing the prosthesis will involve impressions and may involve a series of appointments (usually 2-4) before it is finished.

After the procedure there will be some discomfort and swelling. Occasionally along with the swelling there may also be slight bruising of the skin overlying the area which will fade over a week or two. If you are a smoker or have a pre-existing medical condition, which affects soft tissue healing, the amount of swelling may be greater.

The gum tissue in the region where the implants are placed may change appearance/colour and take on a white appearance for a short time (normally two weeks) after surgery.

Following the completion of treatment, you will require regular long term review with both me and with your regular dentist and hygienist.

**Initials....................**

**Costs and payment schedule**

The total cost for the treatment will be **£xxxx**

The implants costs are staged:-

The first instalment of **£xxx** is required when the implant is placed.

The second payment of **£xxx** is required when the implant is ready to be restored and the impressions are taken.

The final payment of **£xxx** is required when the final crown is fitted.

Review appointments after completion of treatment will be charged at our normal examination fee, currently £xx, plus the costs of any additional requirements such as radiographs and scans whenever these are clinically required.

**Initials....................**

**Risks**

Fortunately implant treatment is a relatively low risk procedure. However, no surgery comes without a small element of risk and the specific risks in your case are:-

* Implant rejection resulting in loss of the implant(s).
* Implant infection. This may result in loss of the implant(s).
* Recession of the gum. It is important for you to know that the level of the gum can never be totally predicated pre-operatively. Sometimes the gum can recede following implant placement. If this occurs the level of the gum will be higher than the neighbouring teeth and will give the cosmetic appearance of a long tooth.
* Peri-implantitis. This is a condition which may occur years after implant placement. The cause is presently not fully understood. The condition results in loss of bone around the implant which may eventually result in loss of the implant. A high standard of oral hygiene is believed to reduce the risk of peri-implantitis.
* Following the loss of a tooth the “papillae” or “v-shaped” gum between the teeth are lost. Although steps are taken to regenerate these papillae, these techniques are not fully predictable and implant crowns can sometimes have less than perfect adjacent soft tissue appearances. The loss of the papillae would result in small “black triangles” being visible between the implant crown and the adjacent teeth. I have shown you photographs of such cases.
* Inferior Dental Nerve trauma. The Inferior Dental Nerve is a nerve that runs through your lower jaw and supplies sensation to your lower teeth, lips and gums. Using the CT scan we are able to determine the position of the nerve very accurately. This allows us to avoid touching it. However, in some cases it may be possible for damage to occur to the nerve from unforeseeable post-operative complications such as internal bleeding or pressure from internal swelling. This may result in sensory problems such as pain, tingling or numbness of the lips, gums and teeth on the affected lower side. These symptoms may be partial or total and may be temporary or, in rare circumstances, permanent.

If any of these complications should occur, you may require further surgical treatment which may incur additional costs. The prognosis for success for dental implants in a case such as yours is around 95% over a 5 year period and around 92% over a 10 year period. These are excellent survival rates when compared to many other forms of surgery. However, it is important for you to understand that implant treatment, in common with all other forms of medical and surgical treatment, is not always successful in every single patient.

In my opinion your specific chance of success is …………

It is also important for you to understand that an implant is not a real tooth. It is an artificial substitute for a natural tooth which has been lost. As such there will be visible differences when compared to natural teeth in areas such as the gum margin and in the feel and shape of the implant tooth to the tongue. The degree of these differences will vary from patient to patient and depend upon postoperative healing factors, such as the amount of gum recession and/or bone recession that can occur during the healing phase. These factors cannot be reliably predicated beforehand.

**Initials....................**

**Expected benefits & desired outcome**

The expected benefits for your treatment, assuming that you have no complications, are that you will have your gap restored with an implant retained crown, which will allow you to chew on it and will look as close to a real tooth as we are able to clinically achieve.

**Treatment timing**

The amount of time the treatment will require varies with the degree of difficulty and the amount of work needed. It is important to bear in mind that the teeth need to be made individually to suit your specific requirements and mouth. This type of precision work is very time consuming and cannot be rushed, as it must be of the highest quality. Prior to fitting the finished teeth, a number of visits may be necessary to make fine adjustments. Therefore, it is important to keep us informed of any travel arrangements or important engagements you may be planning and to give as much notice as possible.

Please keep this letter safely as the treatment described is long-term and it can often be difficult to remember the exact details several months later. You have also received a number of patient information leaflets containing further information regarding your implant treatment. If you are unclear as to any of the areas discussed please contact me. During the course of the implant treatment it is important that you keep us informed of any changes to your general medical condition and of any other additional treatment that you may receive from a doctor or dentist. Failure to keep us informed may adversely affect or delay your treatment. You are advised to discuss any major travel arrangements that you may have prior to commencing treatment.

It is also important that you keep your appointments and do not miss any stages as this may also adversely affect or delay your treatment. I must also mention that should an appointment be missed or cancelled with less than 48 hours’ notice, an additional fee will be charged.

**Acceptance for treatment**

Patients will only be accepted for this treatment if they can demonstrate that they can maintain a high level of plaque control and oral hygiene. There should be no medical conditions that would contraindicate the procedure. It is important to inform us of any changes to your general health or medical condition.

I would be very grateful if you could complete and sign one of the enclosed consent forms. Please retain one copy and return the other to the practice by post as soon as possible.

Forty eight hours’ notice of cancellation will be required to avoid a charge.

If you have any further queries please feel free to give me a call or e-mail, whichever is best for you.

Best wishes and kind regards.

Yours sincerely,

Dr xxxxxxxx

*Dental Surgeon*

**IMPLANT TREATMENT CONSENT FORM**

Name : **xxxxxx**

Date of Birth : **xx/xx/xx**

DENTIST

I confirm that I have explained both verbally and as described in the treatment proposal letter the full procedure and such appropriate options as are available to the above named patient in terms which, in my judgement, are suited to the understanding of the patient.

Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_/\_\_\_\_\_/\_\_\_\_\_\_

**Dr xxxxxxx**

PATIENT

If there is anything that you do not understand about the explanation, or if you want more information, you should ask the dentist.

Please check that all the information on this form is correct. If it is, and you fully understand the explanation, then please sign the form. You should ensure that you have read your treatment plan letter and the enclosed information booklet on dental implants. Please keep your copy of this consent form in a safe place.

I am the patient, **xxxxxx**

I agree to:

* The procedure that has been proposed and explained to me by the dentist named on this form
* The administration of local anaesthetic
* The terms and conditions of fee payment as stated on my treatment plan letter

I understand:

* The full nature of the treatment proposed in my treatment plan letter and all other options that are available to me
* The specific and general risks associated with the procedure
* Any likely complications of the treatment and all treatment alternatives
* That any procedure in addition to the treatment described in the treatment plan letter will only be carried out if necessary and in my best interests, and can be justified on medical grounds.

I have:

* Told the dentist about any additional procedures that I do not wish to be carried out without my having the opportunity to consider them first
* Informed the dentist about all existing and previous medical conditions and infectious diseases that are know to me
* Informed the dentist about any previous or current psychiatric conditions or treatment

Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_