

UNDERSTANDING DENTAL IMPLANTS

David Todd, DMD, MD
Oral and Maxillofacial Surgery and Oral Implantology
120 Southwestern Drive
Lakewood, NY 14750
(716)- 484- 8091

Implant FAQ

DENTAL IMPLANTS: IMPROVING YOUR ORAL HEALTH, COMFORT, FUNCTION AND APPEARANCE

NATURAL TEETH:

Your own natural teeth present in your mouth in a healthy, well maintained condition are the best natural implants which you can possibly have. There is nothing else which compares with them. Therefore, it is in the best interest of your general health and well-being to do anything which you can to keep your teeth in the best condition for the longest possible period of time. With proper, regular dental care, you will be able to accomplish this goal.

FIXED BRIDGES:

When a tooth is lost, it is best to replace the tooth as promptly as possible. A fixed bridge is satisfactory for replacement of a single missing tooth. In order to fabricate a fixed bridge your dentist must remove enamel from at least on tooth one either side of the missing tooth. These teeth will support the bridge. A common problem below a bridge is tooth decay. Primarily because of tooth decay the median life span of a bridge is 8-10 years. Another potential concern is that the bridge does not possess the same degree of root support as all the teeth it will replace. This may not be a significant problem when dealing with replacement of a single tooth. However, if we expand on this idea and assume that you have lost two or three teeth in a row, or have lost several teeth spread out intermittently throughout your mouth, it quickly becomes obvious that a considerable amount of root support has been lost. This does make a difference. In effect, we have increased the load on the remaining teeth, because there are fewer of them. In this situation, implants can be used to replace the missing teeth and prevent increased stress on the remaining teeth.

ROOT CANALS:

Root canal therapy is an effective treatment to treat abscessed teeth. The exact success rate of a root canal treated tooth long term is unknown and dependent on many variables. Root canal treated teeth are prone to repeat infection, fracture and decay. Unfortunately,

for many patients the long term success rate of root canal treated teeth falls between 50% - 90% after 8-10 years.

PARTIAL DENTURES:

Does a partial denture replace the missing teeth equally well? A partial denture is either tooth or tissue supported. If it is entirely tooth supported, the space has been replaced or filled in, but the supporting teeth were no more than they were before. In other words, the load has been *increased* on the remaining teeth. This increase in load on the remaining teeth also occurs if the partial is both tissue and tooth supported. The areas where the teeth are missing have been filled in with tissue supported denture teeth, which transmit the forces of chewing to the gum and bone beneath the denture. This means that the gum tissue and bone under these denture areas will shrink gradually, and the partial denture will have to be relined periodically. If these areas are not periodically relined, so as to contribute to the overall support of the partial denture in the mouth, a space develops under the denture. Once this occurs, tissues under the partial denture are not bearing its fair share of the chewing load. As a result, the teeth become overloaded. Under these conditions, the remaining teeth undergo accelerated bone destruction and are lost much more rapidly.

You must also realize that a partial denture is removable, is subject to movement when you eat and speak, and must be taken out at night. It is not permanently fixed in the mouth.

TOOTH SUPPORTED BONE:

Nature has provided bone to support the teeth during the years when there are teeth present in the mouth. When the teeth are lost, the tooth supporting bone is lost. As you know, nature takes away from you what you do not use. For example, a person who is confined to bed for a long period of time loses muscle tone. In the mouth, the bone under the gum “shrinks” and dentures become loose. In the mouth of a person who has lost about half his teeth, the supporting bone is present only around the teeth which remain. Where the teeth have been lost, the shape of the bone often resembles the appearance of the back of a “sway-backed” horse. Where implants have been placed and properly maintained, the bone is preserved, because the bone is being used as it was when the natural teeth were present.

WHAT IF ENOUGH BONE IS NOT PRESENT TO PLACE IMPLANTS?

Predictable, proven procedures, utilizing bone graft material and membranes are available which help your body to regrow bone it has lost. These procedures are safe and effective, and do not require bone grafting from another part of your body. The membrane creates a space into which your body’s bone cells grow unimpeded. The result is new bone, which has been shown to be more than capable of supporting implant function over time. This procedure has been shown to be highly predictable in both animal and human

studies. This bone regeneration technique is used to improve esthetics, to rebuild bone in trauma cases, and build bone for patients who wish to have implants placed.

CHEWING EFFICIENCY:

For purpose of comparison, assume that a patient with all of his own natural teeth in a healthy, well maintained, functionally accurate condition chews at 100% efficiency. This efficiency will decrease with every tooth lost. The severity of this decrease in chewing efficiency and comfort depends upon not only the replacement of the missing teeth, but also upon how they are replaced. Ultimately, if the patient reaches the point where he or she has not any remaining teeth, he may have (in an ideal situation with good-fitting dentures on adequate sized bone ridges) a chewing efficiency of perhaps 15-18%. If the ridge is not adequate, the percentage decreases. With implants and either a fixed bridge or a specially designed anchored denture, chewing efficiency can be regained.

GENERAL HEALTH:

Because it is important that you heal normally from the procedure, implants are not performed on uncontrolled diabetics, as healing would be severely compromised. In addition, patients who smoke heavily, 1 pack a day or more, have a lowered rate of healing and can have an increased rate of complications. If you have not had a physical exam by your physician in some time, it is recommended that you do so.

HOME CARE:

Your homecare must be excellent, and you must keep your teeth and implants clean, so that any harmful bacteria are under control. You must be able to clean with a toothbrush and dental floss to keep plaque off both your teeth and your implants. If this is not done, there is a very high probability that the implants will fail and have to be removed.

X-RAYS AND DENTAL MODELS:

You must have a complete examination with dental models and xrays. The dental xray is often a panoramic (the x-ray which circles around your head and presents a continuous picture of your mouth, teeth, skull, sinuses, etc.) to determine which treatment will best meet your individual needs and desires.

LOSS OF NERVE SENSATION:

There are cases in the lower jaw in which there can be a loss of nerve sensation following certain surgical procedures. Quite often the loss of sensation is temporary and related to "stretching" of a nerve in the lower jaw. Rarely, the loss of sensation can be permanent. We have placed over 1500 implants at the time of this writing and have had 3 patients who have not had complete return of sensation following implant placement.

ARE ALL IMPLANTS SUCCESSFUL?

No. There are many variables to be considered in placing implants. First, the patient must be healthy, so that there are adequate healing powers present in the patient. If the patient is an *uncontrolled* diabetic, for example, his or her chances for healing successfully to perform implant therapy are not very high. The same is true if the patient suffers from any autoimmune diseases, or other serious systemic problems, or is a heavy smoker. If you are unsure of your overall medical health then a thorough medical examination and testing must be carried out. Age is *not* a negative factor with regard to the success of implant therapy.

In order to achieve the highest rate of success possible with this type of treatment, a proper dental diagnosis must be made, and the appropriate implant treatment design must be made for you, as an individual. It is important that the doctors performing your treatment for you understand the proper applications of the various types of implants under different circumstances. It is crucial that the treating doctors be highly experienced in implant therapy, as all phases of treatment must be carried out correctly. Finally, both your implants and your new teeth must be adequately cared for both by your doctors and by you at home, on a continuing basis. This care is crucial to the long term success of your implant treatment.

WILL MY IMPLANTS LAST A LIFETIME?

We do not know. There are many implants which have been in the mouth for as long as studies have been carried on (many of which are now over 40 years in duration), for the various types of implants. There is no increasing loss of implants over time in these studies in healthy patients with good homecare, so there is no reason to expect these successful implants to be lost.

IS AGE A DETERRENT?

No. Bad health is a deterrent. Many people seventy and eighty years of age are better suited for implant therapy than someone years younger who suffers from a myriad of health problems. Older people are more likely to need implants, because they have lost more teeth and have lost more bone ridge, just as older people are more likely to wear hearing aids.

Age is not just an accumulation of birthdays, but also an attitude. Good judgment indicates that we should plan to live for as long as we are able. Allowing ourselves to deteriorate knowingly makes about as much good sense as an airline allowing its airplanes to get in a dangerous situation without bothering to repair them. As long as you live and breathe, and are important to someone, you owe it to yourself and your family and friends to take the best care of yourself that you possibly can.

REJECTION BY THE BODY:

All of the implants we use are made of biologically compatible pure titanium alloy. This material has undergone extensive testing over a period of decades, in both animal and human studies. There is no antigen-antibody response to titanium which could cause rejection. *No rejection of commercially pure titanium by the human body has ever been documented.*

If an implant fails (an uncommon occurrence, as success rates of the implants we use have been shown to be in the mid to high 90% 's in a number of studies published in a scientific journals) it is not because of rejection. However, if the bone doesn't "fuse" to the implant, the implant becomes loose and unsuitable to support missing teeth. The implant is removed and another one is placed, which almost always successfully fuses to the bone.

CAN IMPLANTS CAUSE CANCER?

No. There is no instance which has been reported in the medical literature in which dental implants have ever been the cause, or even the possible cause of any cancer.

HOW IS AN IMPLANT INSERTED?

The gum tissue is gently reflected and the implant is inserted into the bone which has been prepared for this purpose. Sometimes no sutures are needed, however often sutures are required to help position the gum tissues around the implants.

DECISIONS:

If you have decided that you want to be considered as an implant candidate, you should be encouraged by the fact that there are many people in this country and throughout the world who have had hip prosthesis, corneal transplants, etc and have found the quality of their lives dramatically improved by the procedure. While placement of a dental implant is not as involved as these procedures, proper use of dental implants will increase your comfort, function, esthetics and quality of life.

GUARANTEE:

Just as it is impossible to honestly guarantee the results of any type of medical procedure which you may undergo, no one should pretend to guarantee any implant or prosthesis which is placed into the mouth or any other part of your body. To do so would be misleading and unfair to you. However, the published success rates of this type of procedure are very high, and my personal success rates are well over 95%. We can assure you that we will perform therapy to the best of our abilities and will continue to assist you both during and after active treatment in any way possible. We will do everything we can to ensure that your treatment succeeds. Naturally, you will have to make the same commitment. If you do not hold up your end of the bargain, with regard to maintenance, etc., your implant therapy will very likely fail. An integral part of this care will be returning to your restorative dentist at regular intervals for examination,

cleanings, etc. If you do not do this, it is very likely that your implants could become problematic without your knowing it.

FURTHER QUESTIONS:

If you have any questions which have not been answered by this monograph, please feel free to ask them. We will always do our best to inform you of all aspects of both your options and actual treatment. Should you wish to speak with patients who have undergone the same type of therapy which you are considering, please let us know. We are happy to give you the names and telephone numbers of such patients, so that you may contact them at your convenience.