Got Implants?

H Dentistry PLLC

The Legacy Implant we use is a grade 5 biocompatible titanium product with a surface that is roughened by blasting with particles of hydroxyapatite, the primary mineral content of bone. Roughening creates more surface area for bone attachment.

No tooth is as good as your original <u>healthy</u> tooth. Teeth are more predictable than implants. If implants are your hope for an easy, low maintenance replacement of teeth, you are possibly misled by the media! WITH THAT UNDERSTOOD, <u>implants ARE the ideal tooth replacement option</u> and the "standard of care" because, compared to the other options of bridges (if there's a tooth on each side of the gap) or a removable partial, they are easier to clean and do not involve cutting on adjacent teeth that often do not need crowns. Their downfall is their usually greater cost, and in rare cases a person cannot open wide enough for the necessary equipment to place and restore an implant. Dental implants have a success rate of 90%. Because almost all causes of failure are patient related, there is no warranty on implants or their restorations. 3 parts make up an implant tooth: Implant, Abutment (connects crown to implant and is retained by a small screw), and Crown. So, I've created this educational consent form to improve your rate of success. I break it all down in this order:

PROBLEMS THAT MAY CAUSE IMPLANT FAILURE

A. How they are <u>CAUSED</u>.
B. How to <u>PREVENT</u> them.
C. How they are <u>FIXED</u>.

Advertising, Social Media, Others Experiences, Google "Research" (ie. "hours of online research"):

A. This may sound silly, but we all create opinions based on experience(s). When we've not personally had the experience, we rely on ads, the opinions of others, and the stories of others. Our opinions often lead us to take the easiest OR most desirable path (ie. "Get the implant(s) restored in just....").

B. Override your brain systems that want what you think is best and trust that you and your situation is unique and we care more about your long term success, health, and happiness than we care about if we fit in with what ads or other sources are trying to convince you is acceptable. If you elect full mouth implants, know that a minimum of 4 upper implants must succeed or it all fails. C. Read this document, ask your questions to me (Dr H), and accept the fact that what has or can be done is not always best. Be flexible enough to do what is best for you and your long term goal.

Speedy Process:

A. Placing and/or Loading an implant too early (while bone is still healing).

B. Slow down your desires. You're in this for a *lifetime* investment. Though bone is often healed enough after an extraction for implant placement at 3 months, it's better to wait for SIX months so the bone is FULLY healed and past the "woven" stage. This is not mandatory nor the current standard, but it is my recommendation. The same applies to torque testing and restoring the implant. Wait SIX months, instead of the accustomed 3-4 months, from when the implant surgery is done before proceeding with restoring the implant. Does that mean a full 12-14 months from extraction to restoration? Ideally yes. Again, remember you're in this for a lifetime investment. I believe it's worth the extra time up front to improve the long term prognosis.

C. Start over = Cut the implant out, bone graft the site, and start over.

Gum disease ("peri-implantitis"):

- A. Inadequate oral hygiene. If your prognosis for your teeth was bad because of this disease, it's bad for implants too.
- B. Improve oral hygiene with proper brushing and flossing. This disease is usually manageable if treated early. This disease usually needs maintenance treatment for life.
- C. Start over = Cut the implant out, bone graft the site, and start over.

Breakage of what the implant supports (crown, bridge, denture):

- A. Clenching (day or night), no protection by a full arch acrylic night guard, eating hard objects (same that could crack a tooth). Acrylic teeth are not as strong as natural teeth.
- B. Control daytime clenching. Wear an acrylic night guard every night. Avoid eating hard things.
- C. Make a new one. Consider upgrading to a metal substrate or even solid metal (not normally used, more durable and costly, but less esthetic).

Crown or bridge pops off:

- A. Sticky foods, you have "short teeth" with a cemented crown.
- B. Avoid sticky things, clenching, and grinding. Consider upgrading to a screw retained crown on a custom abutment.
- C. Re-cement. If it repeats, start your crown or bridge over with an upgrade to a screw retained crown on a custom abutment.

Recession (visible metal base of implant):

- A. Poor oral hygiene, possibly too narrow or sloped jaw bone, too wide of a crown on a back tooth.
- B. Improve oral hygiene with proper brushing and flossing or using a waterpik. Proper planning: we design the crown to contact only in the right center spot (sometimes a "small molar" crown is made instead of a big one).
- C. Tissue graft may be attempted, but results are always questionable. Otherwise: no fix other than to cut out the entire implant, graft the bone, and start all over.

Loose screw (holds parts together):

- A. Grinding, changes in biting forces as teeth move over time; especially flaring (teeth pushed outward).
- B. Control daytime clenching. Wear an acrylic night guard every night. Avoid eating hard things.
- C. It is usually possible that the original screw may be re-tightened one to two times. After that, a new abutment and crown are usually needed. Sometimes the entire implant may need replacement.

Over-tipped implants:

A. Greater than 30 degrees angulation to biting forces.

B.Use 3D X-ray technology combined with 3D surgical pilot guide to get proper angles in all directions and ideal implant diameter and length. Sometimes you can't have the ideal scenario and it's just a risk.

C. Start over if it has failed (come loose).

Residual root pieces:

- A. Complete extraction in the past was not complete.
- B. Make sure entire root(s) are removed when possible.
- C. Remove it, possibly graft the socket site to prepare for implant.

Adjacent teeth have infections:

- A. Abcessing tooth/teeth, gums disease, etc.
- B. Live a dental life of prevention with 6 month checkups and treatment as needed.
- C. Resolve these before starting implant surgery. Otherwise, situations vary as do prognosis if the implant is already in place.

Black triangle of space in smile between two adjacent implants:

- A. Two implants side by side with insufficient bone between them or tooth and implant, or the contact of tooth crown and implant crown is too far away from bone (more than 5mm).
- B. Proper planning and treatment.
- C. New crown if it's the contact location. Start over and graft the area if it's the bone. In some cases, it cannot improve.

Poor blood flow:

- A. Tobacco/Smoking. This increases your risk of implant failure by FOUR TIMES. It's a big deal.
- B. Don't start the habit. Quit if possible.
- C. Start over.

Poor blood flow:

- A. Too thin jaw bone or too wide or long of an implant; less than 1.5mm to a tooth or 1.8mm to outside bone wall or less than 3mm to another implant.
- B. Avoid placing implant at same time as extraction unless there's lots of extra bone. Use Quality 3D X-ray and proper planning WITH use of a surgical guide.
- C. Start over. Our process follows B above so this is prevented.

Poor blood flow:

- A. Age
- B. Keep your body healthy.
- C. Get your body healthy. Possibly start over.

Lack of hard gums around implant to prevent food impaction and/or bleeding gums (gingivitis):

- A. Recession of gums, lack of gums at start, thin gums, possible food or bacterial impaction.
- B. Gum graft surgery.
- C. Gum graft and hope it prevents further recession or impaction of foods and bacteria.

<u>Poor Lamina Dura (dense bone around tooth roots):</u>

- A. May mean poor bone metabolism: may be due to hyper-parathyroid, kidney issues, Vit D deficiency: all require diagnosis and treatment by your physician.
- B. Proper exam and treatment by your primary physician.
- C. Proper exam and treatment by your primary physician. If loose, start over.

Excessive biting force (TFO: Trauma From Occlusion):

- A. Too much contact from opposing tooth (bite is too tall), early loading (not waiting long enough for the implant to heal/bond to the bone, crown hits outside of center or in an off angled direction), and/or tooth mobility from clenching/grinding during day and/or night.
- B. Proper planning: Don't pressure the dentist to restore the tooth with a crown if the implant isn't ready (slips a little during the torque test). Dentist uses an exceptional lab and the bite doesn't feel too tall when the crown is put on. Dentist makes sure the tooth is either a little out of bite or on the center of its line axis with a little contact (ideal). Consider a custom made night guard with little retention on the implant crown.
- C. Adjust bite if needed. Start over if failing.

Overheated bone:

- A. Forced drilling during surgery with insufficient cooling by water.
- B. Properly functioning surgical equipment. Drill cooled by excessive amounts of sterile saline.
- C. Start over. Our process follows B above so this is prevented.

<u>Implant not fully screwed in to the bone:</u>

- A. Crest of bone not visualized during surgery to confirm implant is fully screwed in.
- B. Minor retraction of gums after pilot hole may be created for dentist to fully visualize implant is all the way in. Sutures after completed.
- C. Usually leave as is with recession if it's strong. Sometimes start over.

Residual cement left by the Dentist:

- A. Use of cements that are hard to clean up.
- B. Use cement that is easy to clean up and when possible use a combo system that can just be screwed in without cement.
- C. Depends on the case. Usually pull tissue back, clean up implant, keep clean and hope for the best. Sometimes start over.

Screwed in dentures aka "Hybrid Denture" (HIGH RISK):

- A. Difficulty with hygiene of implants, more susceptible to periodontal disease, and imbalance of bite. Requires 15mm of clearance per arch/jaw which usually means cutting back good jaw bone and/or opening the bite: usually both.
- B. Try snap on dentures instead: 15mm clearance per jaw arch is not required, the denture is removable and cleanable every night and morning by you and every 6 months by a hygienist, and there's a tiny bit of cushion that may reduce the risk of fracturing your denture. Snap on denture parts wear out and need replacement over time: usually every 2-3 years.
- C. When they fail, start over.

Medical problems and medications we may not be able to modify or counteract:

A. Hyper cholesterolaemia; Chronic use of medications (**Antidepressant** SSRI's Prilosec and Nexium; Steroids); <u>Diabetes</u> (HUGE factor!!!); Post-menopausal Women; Caffeine in any form which weakens bone generally; **Obesity**; Sleep Apnea; **Alcoholism**.

- B. Proper exam and treatment by your primary physician.
- C. Proper exam and treatment by your primary physician. Start implant over.

Medications:

- A. Motrin/Ibuprofen and Aspirin based medicines may inhibit necessary swelling that helps in bone healing.
- B. Don't take Motrin/Ibuprofen and, if possible, Aspirin for one month prior to implant surgery and for the next six months afterwards.
- C. Start over.

And for any others not covered: Failure without a known cause:

- A. Unknown.
- B. Not possible.
- C. Start over.

INSURANCE COVERAGE

Though dental implants have been around for decades now, they are still not always a "covered benefit" and most of what's needed to do them right is not covered at all, such as CBCT (3D Xrays), 3D printed surgical guides, diagnostic casts, etc. We recommend you join us in being "Insurance Friendly, Not Insurance Driven" when it comes to deciding what you will do for your health.

THE PROCESS (FOUR OR MORE APPOINTMENTS) OF GETTING YOUR IMPLANT TOOTH

- *If needed, Extract an existing tooth and, ideally, graft the socket to preserve the top 1-3mm of bone that will otherwise be lost in normal healing. In some cases, a Tissue Graft may be needed too. Then wait 6 months. 3-4 months is the standard and CAN be done, but 6 months allows FULL bone healing and is my personal recommendation.
- *Evaluation Exam, 3D X-Ray, Initial Impressions. From the impressions and the 3D X-Ray we will create a 3D guide for a complete 3D guided surgery from beginning to end.
- *Get you numb and perform your <u>implant surgery using our 3D guide</u>. Either the Stock Abutment (taller metal post), or a Cover Screw (short metal cap to protect implant) is placed on the implant. Then wait 6 months (3-4 months minimum).
- *On this visit, you do not need to be numb and we will <u>Torque Test</u> your implant to confirm your bone has fused to it. If, in a rare case, it's slipping, wait another 3-4 months or consider starting over (remove implant and bone graft, wait months, place another new implant, wait months, etc). If you have an un-diagnosed body wide health issue and the implant falls out, then you will seek a medical consult and we will start over once your health is stable. Otherwise, unless you are investing more time and money for a temporary crown for a highly esthetic case, we will take the impression for your crown. If you have a Cover Screw, we will put it back on after the impression.
- *The exciting day: we place your crown. Yeah! Function and Esthetics restored!

WHAT YOU NEED TO DO AT TIME OF SURGERY:

- *At home as prescribed by us: Take antibiotics as prescribed: usually 500mg Amoxicillin every 8 hours started 1 day before surgery OR we may have you take FOUR (4) TABLETS one hour before your appointment and continue the medication until gone.
- *<u>At home by you</u>: 1000mg of Over The Counter Tylenol 1 hour before implant appointment. This will help manage pain after treatment.
- *At office by us (no charge): Rinse with Chlorhexidine for 30 seconds before we start your appointment.
- *At home as prescribed by us: Continue antibiotics as prescribed until gone. Notify us if you develop an allergic reaction.
- *At home by you: Use a soft diet. Keep the surgical site clean. Keep your head elevated for 48 hours (extra pillow at night). Keep your blood pressure low (no weight lifting or heavy exercise).
- *At home by you: Avoid hitting the implant with hard objects or foods.

MAINTENANCE OF YOUR IMPLANT(S) AFTER RESTORED WITH A CROWN

Science is rapidly changing regarding implants. What was once recommended just decades ago is now discouraged. As of Jan 2020, it is suggested to gently probe around an implant annually; it's important to get the biofilm and obvious tartar off but not be too aggressive. Special implant cleaning instruments are debated and even discouraged by some who recommend to just leave it alone unless it has an obvious need or problem.

What MAY hurt your titanium implant(s): heavy acid (Arestin, Chlorhexidine, Chemotherapy, tooth whitening gels), lasers, scraping debris particles, scraping off titanium, heavy chewing/grinding/mechanical action creating implant/abutment friction and nanoparticles of titanium debris, and possibly more.

SOOOO, the most current recommendations for us to help you include probing/measuring gently annually for health and otherwise leave it alone. If necessary, gently scale off tartar using our special titanium scaler due to inadquate home care and recommend home care include use of a waterpik and a sonicare toothbrush.

If it was fine for years and becomes loose, it will not tighten up and it's better to replace it sooner than later. If this is needed and your gums are not perfectly healthy, then a low dose of Doxycycline Hyclate tablets before placement and continued at least 3 months but no more than 9 months at a dose of 180 20mg tabs at 1 tab twice daily (refilled up to two times) to prevent inflammation and improve prognosis may help. If it's still bad at 9 months, then an implant won't work for you.