

What is a Bone Graft for Dental Implants?

Meta description:

What is a bone graft? Learn the basics of this procedure and how it can help with your dental implants.

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A dental bone graft is a surgical procedure that repairs and restores bone mass to jawbones that have thinned and weakened to the point that they cannot support a dental implant. A dental implant must be placed into healthy, solid bone that will provide a strong foundation for the powerful forces generated during chewing.

Bone Grafts for Dental Implants

What is Dental Implant Surgery?

Dental implant surgery is a method of replacing missing or damaged teeth by placing an artificial tooth root into the bone tissue of the jawbone. During dental implant surgery, an oral surgeon opens your gum tissues, then drills small holes into the jawbone. Tiny titanium posts are then screwed into the holes, where they will act just like artificial tooth roots. Once the jawbone is healed, your oral surgeon will place an implant crown on top of the dental implant.

The artificial tooth roots of a dental implant are made of titanium and work just like natural tooth roots. They provide a solid platform for the implant crown, which is the only part of dental implants that can be seen. Dental implants also prevent bone loss, as they stimulate nerves and blood vessels that nourish bone tissue in the jaws.

Why You May Need a Bone Graft Before Dental Implants

Several conditions may cause a loss of bone in the jawbones. Some disorders like periodontitis can erode and diminish bone mass in the jaws. Injuries may also result in a loss of sufficient bone mass for a dental implant procedure. Even something as simple as losing a tooth or teeth to decay may also cause you to have thin jawbones.

That's because natural tooth roots stimulate the nerves and blood vessels of the jawbone, preventing bone loss. When a tooth and its roots are lost, bone tissue around the tooth socket is

dissolved by the body in a process called resorption. Resorption leaves the bone around the missing tooth or teeth thin and often brittle. Sometimes the loss of bone mass causes the jawbone to become too thin or weak to give a dental implant the solid foundation it needs.

Does Everyone Need Bone Grafting?

Bone grafting is not needed for everyone seeking dental implants. In fact, most candidates for dental implant surgery will not need a dental bone graft. When investigating whether or not a dental implant procedure is right for you, you will have a consultation with your oral surgeon. During your consultation, your oral surgeon will determine if you have sufficient bone mass to support dental implants without dental implant grafts.

What is the Cost of Dental Bone Grafting?

Dental bone graft costs rely on the complexity of the procedure needed in each individual's case. As well, the type of bone graft material also affects the expense of the procedure. Typically, bone graft expenses are highest when material for grafting is taken from your body, running \$2000 and higher.

When dental graft material is taken from an animal, cadaver, or artificial graft material is used, costs are somewhat less, running from \$400 to \$1200.

Does Insurance Cover Bone Grafts?

Commercial insurance does not cover dental implant grafting, neither does Medicare nor Medicaid.

The Bone Grafting Process

How Are Bone Grafts Done for Dental Implants?

In the dental implant bone grafting procedure, your oral surgeon will take bone material from somewhere else on your body and graft it into your jawbone, or use material taken from a cadaver, animal, or made of an artificial substance.

In the first step of bone grafting, your oral surgeon will place you under IV sedation. You'll be comfortably sedated during the entire procedure. Next, after the surgical site is cleaned and disinfected, the oral surgeon will make a small incision into the gum tissue where the new bone material is to be placed.

The bone material is placed into the area that needs to be built up and the incision is covered with a membrane that holds the bone material in place. The incision is then closed.

A bone graft encourages new bone to grow at the site of the graft. Over three to six months, enough bone will grow to provide a steady and stable foundation for dental implants to be placed.

How Painful Is a Bone Graft for Dental Implant?

Bone grafting is considered a minor surgical procedure. After a bone graft, it's typical to experience some minor bruising and swelling. Most people have mild pain.

How Long Does a Bone Graft Take?

Dental bone grafting is a minor surgical procedure. The time it takes your oral surgeon to perform a bone graft depends on how much grafting is required, whether existing teeth need to be removed, and if any other procedures need to be performed first. Simple grafting takes 25 to 45 minutes; a more complex graft may take up to 90 minutes.

In all cases, an oral bone graft is a minor surgical procedure performed on an outpatient basis.

What to Expect After a Bone Graft for Dental Implants

How Long Does It Take for A Dental Bone Graft to Heal?

Initial healing after a dental bone graft is fast, taking one to two weeks. However, building up new bone tissue in preparation for the dental implant procedure itself takes significantly longer.

Although the time needed for a bone graft to mature to a sufficient density and hardness to be able to support a dental implant varies and can take as long as 9 months, typically 3 to 6 months is long enough to completely heal from a bone graft.

Some factors that influence the time needed for healing a bone graft include the recipient's age and overall health conditions. Other conditions and habits, like smoking, may increase the time needed for a dental bone graft to heal. People who smoke have a higher risk of a bone graft failure.

How Long the Pain Lasts

Some soreness, swelling, and bruising after the bone graft procedure is to be expected, with mild pain starting to decrease two to three days after the procedure. Over-the-counter pain medications like acetaminophen are typically effective for controlling post-graft discomfort.

What to Eat and What Not to Eat

After a dental bone graft, it's important to allow the healing process to start immediately. This means consuming eating soft foods for the first 48 hours post-surgery. Soft foods like yogurt and pudding, soft, cooked fish, broth, meal replacement drinks, smoothies, and protein shakes are all safe and nutritious.

Avoid foods that are:

- Acidic, including citrus fruit and drinks
- Hard, crunchy or chewy, including chips and crisp vegetables
- Spicy

Avoid hot or very cold beverages. Also, avoid using straws or smoking for at least 48 hours after surgery. The goal is to allow blood clots to stay in place. Blood clots are vital to the initial healing process, to stay in place.

What Is More Painful—Bone Graft or Implant?

Everyone has a different tolerance for discomfort and that must be taken into account when considering whether a bone graft or dental implant is more painful. Although both bone graft and dental implants are surgical procedures, because they take place under IV sedation, you will feel no pain at all during either procedure.

During recovery, minor soreness, bruising, and tenderness at the surgical site is typical. Most people find that over-the-counter analgesics coupled with warm facial compresses work well for controlling discomfort.