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## Sinus Augmentation Surgery Information

A key to implant success is the quantity and quality of the bone where the implant is to be placed. If you've lost bone in that area due to reasons such as periodontal disease or tooth loss, you may be left without enough bone to place implants.

### **What Is It?**

A sinus lift or augmentation surgery adds bone to your upper jaw in the area of your molars and premolars. The bone is added between your jaw and the maxillary sinuses, which are on either side of your nose. To make room for the bone, the sinus membrane has to be moved upward, or "lifted."

Several techniques can be used to raise the sinus and allow for new bone to form. In one common technique, an incision in the premolar area is made, and a small window is prepared into the wall of sinus. Through this window, the lining membrane of the sinus is lifted, and the space underneath is filled with bone graft material. Your surgeon may explain your options for graft materials, which can regenerate lost bone and tissue. Once the grafting is completed, the window is closed over by the gums and healing is allowed to take place. Depending on your individual needs, the bone will be allowed to develop for 4 to 9 months before implants are placed. After the implants are placed, an additional healing period of 3 to 4 months is required. In some cases, implants can be placed at the same time the sinus is augmented.

The sinus lift technique was developed in 1977 and has become increasingly common as more patients opt for dental implants to replace missing teeth. Undergoing sinus lift surgery has been shown to greatly increase your chances for successful implants.

### **What It's Used For**

A sinus lift is done when there is not enough bone height in the upper jaw for dental implants to be placed. There are several reasons for this:

- Many people who have lost teeth in their upper jaw — particularly the back teeth, or molars — do not have enough bone for implants to be placed. Because of the anatomy of the jaws, the back of the upper jaw has less bone than the lower jaw.
- Bone may have been lost because of periodontal (gum) disease.

- Once teeth are gone, bone begins to resorb (absorbed back into the body). If teeth have been missing for a long time, there often is not enough bone left to place implants.
- The maxillary sinus may be too close to the upper jaw for implants to be placed. The shape and the size of this sinus varies from person to person. The sinus also can get larger as you age.

## **Preparation**

The bone used in a sinus lift may come from your own body (autograft), from a donor (allograft), or from cow bone (xenograft). You will need a special type of computed tomography (CBCT) scan. This scan will allow the surgeon to accurately measure the height and width of your existing bone and to evaluate the health of your sinus.

If you have seasonal allergies, you should schedule the procedure when they are not active.

## **Follow-Up**

After the procedure, you may experience swelling or bruising of the area. You may bleed from your mouth or nose. Do not blow your nose or sneeze forcefully. Either one could cause the bone-graft material to move and or loosening of stitches.

Your surgeon may recommend saline sprays to keep the inner lining of your nose wet and prescribe medicine to prevent congestion and inflammation. You also will be prescribed pain medicine, an antibiotic, and an antimicrobial mouthwash to help prevent infection. Most patients have only a little discomfort after a sinus-lift procedure.

You will see the surgeon after 7 to 10 days. He or she will evaluate the surgical site and remove stitches if they will not dissolve on their own. You might be asked to return a few more times to make sure the area is healing properly.

After a sinus lift, you need to wait several months for the bony material to harden and integrate with your jaw. Depending on the grafting material used, implants may be placed in four to nine months.

## **Risks**

The main risk of a sinus lift is that the sinus membrane could be punctured or torn. If the membrane is torn during the procedure, the surgeon will either stitch the sinus tear or place a collagen patch over it. If the repair is not successful, your surgeon may stop the procedure and give the tear time to heal. Your surgeon can re-attempt the sinus lift once the membrane has healed. This usually takes a few months. A healed membrane tends to be thicker and stronger, which means a second attempt at a sinus lift is likely to be successful.

Infection is a risk of any surgical procedure. However, this rarely occurs after sinus lifts. Prevention involves following all instructions given to you by your surgeon, including taking all medications as directed and abstaining from smoking.

On rare occasions, the existing bone does not integrate with the bone graft material, and the grafted area does not develop a blood supply. If this happens, any implants placed in this area will be unsuccessful because there is no live bone for them to attach to. In this rare event, the graft procedure may be repeated.

### **When To Call a Professional**

After a sinus lift, contact your surgeon if:

- Any swelling or pain gets worse over time. It should plateau and begin decrease after the first three days or so.
- The bleeding does not stop after one to two days.
- Bleeding is bright red and continuous. (Normal bleeding after this procedure oozes slowly and is dark red with possible clots.)
- You think the bony material may have been dislodged after sneezing or blowing your nose.
- Pain does not decrease over time.
- You develop a fever.

Please contact our office should you have any questions or concerns regarding your treatment. We are always here to help.