

Aftercare Instructions: Sinus Lift Procedure

The maxillary sinuses are behind your cheeks and on top of the upper teeth. Sinuses are like empty rooms that have nothing in them. Some roots of the natural upper teeth in the molar region extend up into the maxillary sinuses. When these upper teeth are removed, there is often just a thin wall of bone separating the maxillary sinus and the mouth. Dental implants need bone to hold them in place. When the sinus wall is very thin, it is impossible to place dental implants in this bone.

There is a solution and it's called sinus graft or 'sinus lift'. The dental implant surgeon enters the sinus from where the upper teeth used to be. The Sinus membrane is then lifted upward allowing donor bone or/artificial bone to be inserted into the floor of the sinus. Keep in mind that the floor of the sinus is the roof of the upper jaw. After 6 months of healing, the bone becomes part of the patients jaw and dental implants can be inserted and stabilized in the new sinus bone.

The sinus graft makes it possible for many patients to have dental implants when years ago there was no other option other than a wearing a partial or full denture.

If enough bone between the upper jaw ridge and the bottom of the sinus is available to stabilize the implant initially (5mm), sinus augmentations and implant placement can sometimes be performed as a single (at the same time). If not enough bone is available, the sinus augmentation will have to be performed first. Then the graft will have to mature for 6-9 months, depending upon the type of graft material used. Once the graft has matured, the implants can be placed as a second surgical procedure.

Ridge augmentation and ridge expansion

If teeth have been missing for some time, the ridge will shrink in both height and width. In severe cases, the ridge will not be wide enough or high enough to place a dental implant. A bone graft is placed to augment ridge height and/or width to provide proper anchorage to surround the implant with healthy strong bone.

After sufficient healing (6-9 months) the implants are placed during a second surgical procedure. A second technique involves mechanical expansion of bony ridge. This is a technique used to restore the lost bone dimension when the jaw ridge gets too thin to place dental implants. In this procedure, the bony ridge of the jaw is literally expanded by mechanical means at the time the actual implant is placed. Bone graft material can be placed to supplement the thickness of the ridge around the implant. This is not helpful increasing the bony height of dental ridges, Only width.

Nerve- repositioning

The inferior alveolar nerve, which gives feeling to the lower lip and chin, may need to be moved in order to make room for placement of dental implants to the lower jaw. This procedure is limited to the lower jaw and indicated when teeth are missing in the area of the two back molars and/or 2nd premolar, with the above mentioned secondary condition. Since this procedure is considered a very aggressive approach there is almost always some postoperative numbness of the lower lip and jaw area, which dissipates only very slowly , if ever usually other less aggressive options are considered first such as ridge augmentation or placement of multiple short implants.

Typically, a portion of the outer section of the cheek side of the lower jawbone is removed in order to expose the nerve and vessel canal. The implants are carefully isolated in that area and gently moved out of the bone canal. The implants are carefully placed into the bony ridge extending through the vacated bone canal. Then the neurovascular bundle is released and placed back over the implants. The surgical access is refilled with bone graft material of the surgeon's choice and the area is closed.

Continued research and surgical innovations

Bone grafting and implant placement may be performed separately or together, depending upon the individual's condition. As stated earlier, there are several areas of the body that are suitable for attaining bone grafts. In the maxillofacial region, bone grafts can be taken from inside the mouth, in the area of the chin or the lower third molar region or in the upper jaw behind the last tooth. In more extensive situations, a greater quantity of bone can be attained from the hip or the outer aspect of the tibia at the knee. For significant bone defects, there is a real need to use human bone for adequate bone to be generated. In many instances it can be mixed with some of the artificial materials available to reduce the amount of human that has to be harvested.

In many cases, we can use allograft material to implement bone grafting for dental implants. This bone is prepared from cadaver and used to get the patient's own bone to grow into the repair site. It is quite effective and very safe. Synthetic materials can also be used to stimulate bone formation. We sometimes even use factors from your own blood to accelerate and promote bone formation in graft areas.

These surgeries are performed in the surgical suite under LA only or IV sedation. After discharge, minimal activity is recommend for one day and limited physical activity for one week.