## LATERAL RIDGE AUGMENTATION



## **DEFINITION**

Lateral Ridge Augmentation refers to a bone grafting technique used to increase the width of the jaw bone, often in preparation for a dental implant in an area where a tooth has been missing for some time. It is a minor dental surgery that is performed under local anaesthesia.

### **PROCEDURE**

There are various methods and materials that can be utilized to complete a lateral ridge augmentation. It is possible to use human donor bone, animal bone, synthetic bone, or to even harvest bone from other areas of the jaws or the hipbone. These graft materials can hold space and provide nutrients for native cells to create new bone (osteoconductive), can induce the formation of new bone cells (osteoinductive), or can contain bone creating cells within them (osteogenic). The body converts these materials into your own bone over time; products differ in their rate of conversion.

The graft material is often held in place with a membrane. This can be synthetic such as PTFE ("teflon"), animal collagen (bovine, equine), or can be derived from blood products from the patient.

To perform the lateral ridge augmentation procedure the gums are reflected off the jawbone in the area needing grafting, and bone grafting material is placed over the native jawbone. It is held in place with a membrane and the gums are sutured closed over these materials. The sutures stay in place for a month and require removal.

At our office we are currently using:

Human Donor Bone:

https://www.citagenix.com/en/regen-products/by-brand/raptos-allografts/

Resorbable Collage Membrane (Bovine):

https://www.citagenix.com/regen-products/by-brand/neomem/neomem-neomem-membrane

## LATERAL RIDGE AUGMENTATION

# WHAT ARE THE RISKS OF THIS PROCEDURE?

The lateral ridge augmentation procedure is a minor dental surgery and carries with it the common risks of localized pain, swelling and bruising which may last up to a week. Post operative bleeding is not expected, but may occur for a day or two; please let us know if you are taking blood thinners or have taken bisphosphonates. Scarring of the surgical incisions and recession of the gums may occur. Risk of acquiring a pathogen from the graft material is negligible.

It is possible for the sutures to come loose or for the gum tissue to tear; please be very gentle with the area as healing progresses. Maintaining adequate closure of the wound is imperative for the success of the graft. It is normal for granules of graft material to escape from under the membrane and to work their way out of the gums; this is not a concern.

The body may resorb the bone graft material, leaving inadequate width for a dental implant. If the procedure is not successful we often refer to an oral surgeon or periodontist for a new graft, with more extensive techniques.

Strong gum tissue is required for the success of the graft and the implants; a referral to a periodontist for a gum graft may be recommended in cases where the gum tissue is thin or has scarring or recession.

#### HOW DO I TAKE CARE OF THINGS?

Be very gentle! Do not brush the area of the graft or swish with mouthwash; "pool and drool" your mouthwash. Be gentle spitting out toothpaste. Avoid an electric tooth brush until cleared to do so.

If you are wearing a denture, be careful taking it in and out and let us know if there is pressure on the graft site. Do not pull at sutures or press on the gums!

Please take the prescribed medications and avoid vigorous exercise for a few days.

If you have any questions please contact me at drdave@nelsonavedental.com,