

What is a sinus lift?

The maxillary sinuses (blue) are closest to the teeth

It's a **surgical procedure which grafts bone to the upper jaw** at the position of the molar and premolar teeth. The maxillary sinus membrane is lifted upwards to make space for the additional bone.

The sinus system has several parts but it's the maxillary sinuses which sit closest to our teeth. You might sometimes get a toothache when you have congestion or a bad cold – this is because the pressure on the sinuses transfers to the tooth roots in the upper jaw.

The technical name for this procedure is a “maxillary sinus floor augmentation”, but you may also hear the terms “sinus augmentation” and “sinus graft” used. A specially-trained dental clinician, periodontist or oral surgeon carries out the surgery.

Why might you need this procedure?

A sinus augmentation is usually performed when a patient has **insufficient bone** in their upper jaw to [support a dental implant](#). Dental implants fuse with the jaw bone in a natural process called osseointegration, but this relies on there being a certain amount of bone present.

You may need sinus lift surgery before getting implants if:

- your jaw bone has previously been damaged, for example from trauma or a [difficult extraction](#);
- a cyst or tumor has been removed from the area;
- you have suffered bone loss as a result of [periodontitis](#);
- your bone has receded because of tooth loss (the socket can lose 40-60% of its bone structure within the first three years);
- you naturally have a large sinus cavity or thin jaw bone.

Not everyone who gets molar or premolar teeth implants will need this surgery. However, it's a fairly common procedure.

What does it involve?



Implants must not interfere with the sinus membrane

Preparation

To begin with, your dental surgeon will conduct a consultation to discuss your needs. As part of this, they will take [dental x-rays](#), and perhaps CT scans, to assess the current condition of your jaw and ascertain whether you are a suitable candidate for a sinus procedure.

The grafted bone can be sourced from a number of places:

- Your own body (either from another part of your mouth or another bone – often in the hip or leg)
- Another human (people may donate their bone tissue when they die)
- Cow bone
- A synthetic material such as hydroxyapatite

All of these materials are safe and are processed to ensure they are free from disease.

Surgical procedure

There are various ways to carry out sinus graft surgery. They all begin with making an incision in the gum to expose the bone underneath.

Most commonly, the dentist cuts a small “window” into the bone and pushes it up to reveal the sinus cavity. The cavity membrane is lifted and the space below is filled with granules of the bone graft material.

Then, the gum tissue is stitched back together.

In the animation below you can see how this works in practice:

The technique [your dentist](#) uses may be different, depending on your personal circumstances. Be sure to discuss this if you have any concerns.

The main risk of this surgery is the piercing or tearing of the membrane. In the rare event that this happens, it can be stitched or patched to repair it. Often the surgery can still continue as planned; in other cases, the membrane must be given time to heal before the lift takes place.



Your dentist will regularly check your progress

Recovery

Immediately after your surgery you may experience swelling in the area and bleeding from your mouth or nose. You'll probably **feel uncomfortable for a few days afterwards**, but most patients don't experience major discomfort. If any bleeding continues for more than two days, or pain and swelling get worse, you should contact your dentist immediately.

There is a risk of the sinuses becoming infected, but your dentist will give you medication to protect against this. You'll have to be careful not to sneeze or blow your nose heavily since this can move the bone graft material or dislodge your stitches. If you are prone to allergies, your surgery will probably be scheduled for a time of year when these won't flare up.

After 7-10 days you'll return to your dentist so he can check the progress of your healing and remove your stitches, if they haven't dissolved by themselves. You'll have several more visits during the healing process to check everything is going as planned.

Placing the implants

Most often patients must **wait 4-9 months** before they receive their implants. This gives the bone a chance to fuse in its new position. The exact waiting time will depend on the type of material used.

It is possible in some cases to place the implants as part of the sinus surgery – without any waiting period. One study has shown that although this method is quite safe, [the success rate is lower](#) in patients who have a residual bone height of less than 4mm.

You might be keen to get your implants placed sooner rather than later, but your dentist will advise you on the method that is likely to achieve the best results.