

MED EL VIBRANT SOUNDBRIDGE IMPLANT SURGERY

Expectations, Risks, Complications and Post-operative Instructions

Deafness in some cases occurs when conventional hearing aids are impractical because the external ear canal cannot utilise such an aid, due to blockage or disease. Also, when nerve deafness is present, an aid may be ineffective. In such cases, alternative techniques may be applicable. The Vibrant Soundbridge functions by vibration of a tiny electromagnetic cylinder (floating mass transducer) which, when attached to the ossicular chain or applied directly to the inner ear entrance (round window) stimulates the cochlea to produce sound.

The Soundbridge device is similar in structure to a cochlear implant, but with an attached lead terminating in the transducer; it is effective in the above circumstances to recover hearing.

Implantation of the Soundbridge is undertaken to overcome deafness on the implanted side (both conductive and nerve types), generally when this ear is intolerant of an aid. The transducer has small clips with which to attach it to the chain, where the vibration of the transducer cylinder creates sound sensation. The implant is powered by a small button processor, which is held to the scalp by a magnet.

A small "C-incision" on the rear of the external ear is used to implant the device, as in cochlear implant surgery.

Through this, the device is placed in a soft tissue pocket under the scalp, and the transducer is fed through into the middle ear, to clip onto the chain or to site in the round window. The resultant scar is usually unnoticeable, and the mass of the implant is minimal. The surgery takes about 60 minutes.

More information

- [Implantable Hearing Technology](#)
- [Vibrant Soundbridge animation](#)
- [Information](#)
- [Clinical aspects](#)
- [VSB Overview](#)

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Other Locations

Beenleigh

Sunnybank

Mt Ommaney

Caboolture

RISKS AND COMPLICATIONS

Hearing

Hearing in the operated ear remains otherwise unaffected by the surgery.

Many cases have ringing (tinnitus) in the ears before surgery; this may not be eliminated and can be worse in a minority, although this is very unexpected.

Displacement may occur in some cases, more often in those with the device sited against the round window.

Dizziness

Balance upsets are not expected from this surgery, and are usually related to the anaesthetic or due to unrelated central nervous system origins if present.

Facial Nerve Paralysis

Even in expert hands paralysis of the side of the face may occur for a variety of reasons in ear surgery, but is very rare in this surgery. Paralysis may last several months and then recover completely or partially. Temporary paralysis may also occur from local anaesthetic injection, lasting a few hours and then recovering. Eye irritation from these incidents may require an ophthalmologist's care.

Infection, Pain

The nature of surgery predisposes to general surgical risks but fortunately the ear is generally not troubled by these problems to a severe or prolonged extent.

It is common for the upper ear to feel numb for up to two months

Uncommonly, a collection of blood may form under the wound. This may cause more noticeable swelling and discomfort.

Bruising is common, around the ear and in the neck.

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POSTOPERATIVE INSTRUCTIONS

Surgical wound site

A head bandage applied at surgery will be removed a week after surgery. Keep the wound dry for a week, at which time you will be seen to check the wound. The sutures are soluble and do not require removal. The site may be washed thereafter. Normally a degree of swelling may cause the ear to be more prominent. This fades over two weeks.

Antibiotics will be prescribed and provided prior to discharge. Take these as directed on the packet. Sometimes diarrhoea may occur; consult your pharmacist re medicine for this, but continue the antibiotics and take probiotics to help settle matters.

Pain, Discomfort

Analgesics will be given both in hospital and supplied at discharge. Pain after ear surgery is normally limited, but if concerned, contact us for advice. Some intermittent stabbing type pain may be experienced; this fades in a few weeks. Nausea may occur, but advise our staff if this occurs.

Activities

- Remain active, within reason, returning to full exercise after a week, if well. Return to work when well recovered.
- "Switch-on" is generally done 8 weeks after surgery. The hearing benefits are generally immediately evident, but it may take a little time to become accustomed to the new situation.

Our goal with the surgery is to deliver the best results with the greatest certainty and minimal distress. But in surgery there are no guarantees of success. If you have had a lesser result after surgery, we will do our best to treat the problem, hopefully overcoming this.

Please let us know at Queensland Otolaryngology if you have any concerns or questions, whether before or after:

Contact Numbers

Business Hours: (07) 3839 7677

After hours: (07) 3261 9570

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