

WIDENING THE DEEP CANAL

Risks, Complications and Post-operative Instructions

In several circumstances the deep (bony) part of the external ear canal requires surgical widening. The surgery needed is similar that employed for removal of the exostoses that form after persistent exposure to cold water.

Canal widening is used to straighten a very curved external canal. If a drum perforation is present, or if other repairs are necessary in the deep canal, the curvature may obstruct the approach to this area, or to the drum and chain deeper to the obstruction.

A similar phenomenon is mid-canal narrowing. This “hourglass canal” constriction is a common finding in Down syndrome, and is partly cartilage, partly bone. The constriction can cause collection of debris deep to the narrowing, and also impedes cleaning the site and diagnosis of disease in this area.

Overcoming these obstructions necessitates removal of overlying soft tissue, then drilling back the bony component. Retaining the canal skin is critical to rapid healing after the event. To this end, the canal skin sleeve is elevated carefully and then protected during the deep canal drilling. Canal packs are used to stabilise the replaced skin during the healing phase.

More information

- External Canal Surgery
 - i. [Theory](#)
 - ii. [Total Canalplasty](#)

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Other Locations

Beenleigh Sunnybank Mt Ommaney Caboolture

RISKS AND COMPLICATIONS

Delayed Healing

The canal skin may be very thin, very delicate and easily torn during elevation. Fragile skin of this nature is easily damaged during surgery. Loss of skin may result in delayed healing, particularly if infection intrudes. Expert care will reduce the likelihood of such problems, although limited grafting within the canal may be required to expedite healing.

Hearing

The surgery expects the best possible hearing outcome in almost all cases but this is sometimes not achieved, due to the extent of disease or other factors. Also although many cases have ringing (tinnitus) in the ears before surgery, this may not be eliminated and can be worse in a minority.

Generally, the hearing recovers after removal of the external canal dressings (3 weeks after).

Dizziness

Balance upsets after this surgery is very rare, but in some cases of more advanced disease the balance organs are traumatised during removal of disease or similar actions in the course of the surgery. Fortunately this generally fades, perhaps over a two month course.

Facial Nerve Paralysis

Even in expert hands paralysis of the side of the face may occur for a variety of reasons in ear surgery, in less than 1-1000 cases.

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.

Drum Perforation

During canal widening surgery, minor damage may occur to the drum; alternatively a perforation, weakening or other disease may be present as a reason for the surgery. Limited reparative surgery to overcome any perforation caused during the widening is unusual but highly effective.

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Taste Disturbance

The chorda tympani is the nerve that provides taste sensation to the side of the tongue. It passes near the field of surgery and may be bruised or cut in the course of the procedure, especially if middle ear disease is treated simultaneously. Taste disturbance occurs in about 10% of the latter cases and this may last for up to 12 months, a few remaining permanent, sometimes with slight dryness of the mouth,

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.

Canal widening surgery causes some tissue reaction close to the jaw joint, and this may be stiff or sore for a limited period

POSTOPERATIVE INSTRUCTIONS

External canal site

The ear bowl and canal will have dressings that may become moist from slight bloodstained discharge. Replace the ear bowl dressings as necessary, but leave to canal dressings unmolested until their removal, usually 3 weeks after surgery. Until removal of the dressings, avoid heavy exercise, to reduce perspiration moisture within the canal. Removal of dressings is usually brief and pain-free. Water sports are not possible until the canal is well healed: 6 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. Nausea is less common, but advise our staff if you require medicine for this.

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Activities

- Rest well after surgery; recovery varies from person to person.
- Return to work when well; this is normally after a few days, unless dizziness or other problems intervene.
- The ear canal dressings are removed at 3 weeks after surgery, and the ear reviewed after that. Audiology is undertaken at two months. Subsequent reviews occur on an individual basis.

Our goal in ear reconstruction 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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