

## SIMPLE (CORTICAL) MASTOIDECTOMY

### Risks, Complications and Post-operative Instructions

The middle ear is an air-filled space that extends from the rear of the nose into the stub of bone behind the ear (the mastoid bone). The latter comprises a “honeycomb” of interconnecting cells of air-filled spaces that act as a pressure buffer and air resorption mechanism. If middle ear infection occurs, whether due to an upper respiratory episode, or from a perforated eardrum, the mastoid may become soiled with bacteria and infected in its turn.

The infection may present as an acute episode of pus under pressure, accompanied by rupture of the drum and copious external canal discharge. In children, who have very thin bone over the upper mastoid, the infection may burst into the soft tissues behind the ear, causing a characteristic ear protrusion in front of a soft, red, painful swelling- a mastoid abscess. This picture is commonly preceded by an acute nasal infection.

Alternatively, a pattern of chronic repetitive discharge of mucoid liquid may be seen from a drum perforation. This is due to ongoing chronic infection in the mastoid, with irreversible mucosal and bony infection perpetuating the problem despite antibiotic treatment. The problem may follow previous ear disease, poor hygiene, malnutrition, or diminished immunity responses, e.g. after measles or HIV.

The infections require surgery; the acute infections to head off further complications, the chronic cases to terminate the infection. In the absence of cholesteatoma a simple or cortical mastoidectomy is employed.

The surgery is designed to surgically remove the diseased bone. The mastoid is exposed via an incision behind the ear and then the infected cells are cleared by high-speed drilling, until the site is cleaned back to healthy bone. The resultant cavity in the mastoid may be filled with a vascular soft tissue flap at the surgeon’s discretion, and the wound is sutured. In acute cases a ventilation tube may be placed in the drum to continue drainage of the middle ear.

### More information

[Middle Ear Surgery](#)

#### “Silverton Place”

101 Wickham Terrace  
Brisbane Qld 4000

P: 07 38397677 F: 07 38325723

#### Other Locations

Beenleigh

Sunnybank

Mt Ommaney

Caboolture

## RISKS AND COMPLICATION

### **Hearing:**

Together with disease removal, the surgery normally aims for the best possible hearing outcome, but this is sometimes not achieved, due to the extent of disease or other factors, especially ongoing tubal dysfunction. 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 takes perhaps 1-2 months to fully recover, if drum or chain repair surgery has been performed. Gurgling, crackling, echoing or hollow sounds during this period are indicative of a good outcome.

### **Dizziness:**

Balance upsets after simple mastoid surgery are 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.

### **Recurrent Disease:**

Ongoing disease may trouble the site, especially in infants or immune-compromised cases, requiring revision surgery and/or intensive antibiotic care.

Postoperatively, a vent tube placed at surgery may require antibiotic drop treatment.

### **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 perhaps every 1-1000 cases. Surgery in these cases not uncommonly encounters the nerve in a diseased state, or hidden by disease or bleeding, requiring extra vigilance on the part of the surgeon. 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:**

Generally in mastoidectomy cases drum healing is uneventful after repair, or if drainage has been performed, but a perforation may occur, requiring limited revision surgery to overcome the problem; this is fortunately relatively rare.

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**Taste Disturbance:**

The chorda tympani is the nerve that provides taste sensation to the side of the tongue. It passes across the field of surgery in many ear disease cases and not uncommonly is bruised or cut in the course of the procedure. Taste disturbance occurs in about 10% of 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.

When an incision has been made behind the ear, it is common for the upper ear to feel numb for up to two months, before fading

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

Please notify us at 07 38397677 if you have concerns.

## Postoperative Instructions

**Surgical wound site:**

A head bandage applied after surgery will be removed before discharge from hospital. Keep the wound dry for a week, at which time you will have an appointment to have the sutures removed. The site may be washed thereafter. Normally a degree of swelling may cause the ear to be more prominent. This fades over two weeks.

**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 the 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.

Also avoid forced nose blowing or occluded sneezing, as this may dislodge graft material in the ear. Aircraft flight should be avoided for one month.

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.

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**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. If an incision has been performed behind the ear, some intermittent stabbing type pain may be experienced and which fades in a few weeks. Nausea is less common, but advise our staff if you require medicine for this.

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

**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: 38397677

After hours 32619570.

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