

MASTOIDECTOMY CAVITIES

Origins:

[Cholesteatoma](#) is an infected sac of skin in the middle ear, derived from the eardrum, that causes chronic discharge and, if untreated, may lead to major complications including paralysed face and brain abscesses. It was a significant cause of death in past years.

For many decades, the surgical treatment of was to excise the disease by means of radical [mastoidectomy surgery](#) (open cavity, canal wall down mastoidectomy). The technique essentially gutted the mastoid bone behind the ear canal, to remove infected bone and disease, and was usually undertaken via an incision behind the ear.

[Open cavity surgery](#) varies from removal of a limited part of the mastoid (atticotomy), to total clearance of the mastoid, the eardrum and the ossicular chain. In some cases, restoration of hearing may be attempted. The entrance to the ear may be substantially widened.

Removal of disease by this open method avoids many of the complications of cholesteatoma, and may be performed as a single operation by most ENT surgeons. Regrettably, the surgery also causes chronic problems in many cases.

Complications:

Resultant problems largely relate to the exposure of the moist lining of the remaining mastoid, the destruction of the blood supply, interruption of the ear self-cleaning mechanisms, failure to repair hearing damage, and the onset of infection.

In many cases, the site may remain stable over many years, but occasional cleaning by the surgeon is necessary to avoid a build-up of dead skin debris, which would become chronically infected.

Unfortunately, a substantial proportion of cases succumb to degeneration resulting in "[cavity symptomatology](#)". Cavities may become chronically infected. This commonly causes an unpleasant discharge, discomfort, itch and perhaps pain. Repeated cleaning is necessary; this may be accompanied by discomfort and severe dizziness due to the effects of cold air if the ear is cleared by suction.

Cleaning may be distressing and ineffective if the far reaches of the cavity cannot be accessed adequately during the clearance. The persisting disease is such that cleaning may offer only temporary relief.

The problem is often worsened by water sports, which may need to be abandoned as a result.

Hearing is often poor due to unrepaired eardrum and middle ear damage. A hearing aid may be needed, and its use may worsen infection due to humidity.

Specialist ear surgeons now commonly avoid open cavity procedures, preferring instead more conservative procedures where the canal wall is retained and the open cavity avoided ([Intact Canal Wall Mastoidectomy](#)).

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Other Locations

Beenleigh

Sunnybank

Mt Ommaney

Caboolture

Management of Complications:

An otologist may employ several corrective techniques.

Revision of an open cavity may be advised, but incurs the risk of recurrence of the problem due to the above causes.

The cavity may be cleared of disease then filled with tissue flaps or special biocompatible materials; this incurs a risk of disease left under the material.

Thirdly, the external canal wall may be repaired, along with the eardrum and hearing mechanisms:
Mastoidectomy Reconstruction.

Reconstruction is performed via an incision behind the ear. An overnight hospital stay is normal, but discomfort and pain are usually minor.

Reconstruction surgery has been refined substantially over many years at Queensland Otology, which remains a world leader in this field. The surgery may require two procedures one year apart, but remains the treatment of choice to rehabilitate a troublesome site. Most cases enjoy substantial hearing recovery and return to water sports.

More information:

[Mastoidectomy General Aspects](#)

[Elimination Strategy](#)

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