

MASTOIDECTOMY RECONSTRUCTION

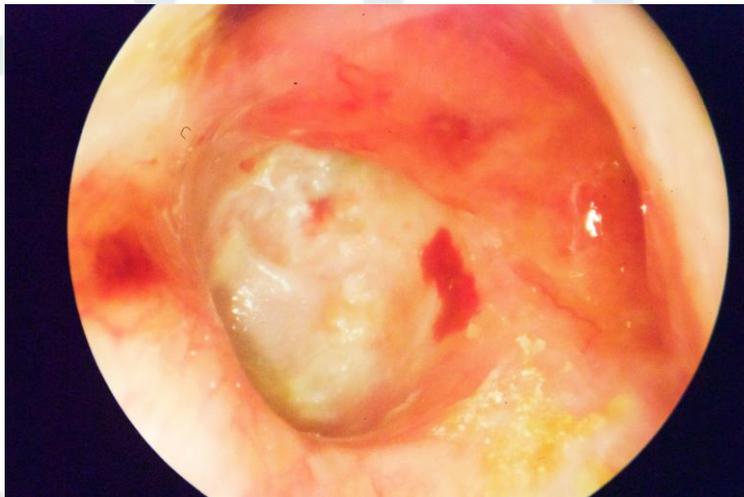
Disease:

In the past, [cholesteatoma](#) of the middle ear has been treated by radical mastoidectomy. Cholesteatoma is the disease most of concern in the middle ear, due to its ability to cause major complications: gross infection, facial paralysis, deafness, brain infections, or death.

Radical Mastoidectomy:

The radical [mastoidectomy](#) was developed in the pre-antibiotic period to excise the disease as thoroughly as possible, to avoid these complications. The surgery, undertaken from behind the ear, excised the greater part of the mastoid bone behind the ear, clearing the cholesteatoma and surrounding disease back to healthy tissue. The cavity thus created was opened up into the external canal, to permit further cleaning and to prevent disease from recurring in an enclosed space.

Unfortunately, due to the disruption of the site and vital ear functions, the cavity site required regular cleaning and commonly became chronically infected. The patient frequently suffered a chronically discharging and uncomfortable ear, loss of hearing, and could not enjoy water sports, as these exacerbated the problem.



As a result, modern surgery now generally avoids the above “open cavity”, preferring techniques (Intact Canal Wall Mastoidectomy) that avoid this complication by retention of the canal wall and reconstruction of the hearing mechanisms.

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Other Locations

Beenleigh

Sunnybank

Mt Ommaney

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Cavity Repair:

The troublesome cavity is fortunately correctable by reconstructive surgery. To eliminate the cavity, repair techniques are used that seek to restore the ear canal back to its normal [dimensions and functions](#).

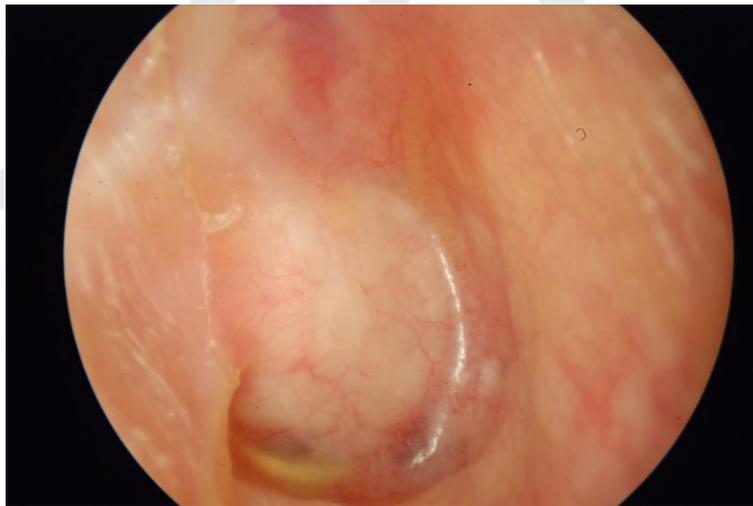
To repair the canal, the otologist must rebuild the rigid structure and, most importantly, repair the blood supply over the repairs, to permit the development of healthy tissues. For this purpose a special vascular flap was needed (middle temporal flap) using tissue under the nearby scalp. The flap re-directs a nearby artery and vein bundle into the repair site and this covers the repairs with healthy tissue, permitting the skin to cover the site and regain its normal self-cleaning ability, which is essential for a long term healthy canal.

At the same procedure, the eardrum and chain are repaired to restore hearing

[Myringoplasty](#)

The surgery is undertaken via an incision behind the ear, and takes 90-120 minutes, plus an overnight stay in hospital. Discomfort is limited.

The procedure is highly effective in overcoming cavity problems, and usually achieves good hearing results. The latter depends on the status of the ear before surgery; some cases are irreparably damaged or dysfunctional, but can be managed with hearing aids or implantable hearing technology.



A minority of cases benefit from other methods, particularly those that have suffered previous severe nerve deafness. Complete excision of the diseased middle ear and closure of the external canal may be preferable, perhaps supplemented with an implantable hearing device to recover communication (cochlear implantation or bone conduction technology).

There are very few troublesome mastoid cavities that cannot benefit from these techniques. Chronic discharge in particular is only rarely irreversible.

More information:

[Historical Techniques](#)

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