#### **MYRINGOPLASTY**

- This is the operation to repair a hole in the eardrum.
- A hole in the eardrum may be caused by trauma, infection, prior grommet surgery or chronic blockage of the Eustachian tube.
- It may initially present with pain, bleeding, discharge or hearing loss.
- The patient will often present to the ENT surgeon during an infection, or after a recent trauma.
- They may not be aware that there is a perforation.
- After a history has been taken, any discharge that is present will be removed from the ear canal, usually with gentle microscopic suction.
- If there is an active infection, a swab will be taken.
- Hearing can be assessed clinically with tuning forks, and more formally with audiometry.



Photo of simple, central type, dry perforation of the right ear drum

# **TREATMENT**

- The treatment necessary will depend on the clinical presentation.
- An acutely discharging perforation may require topical eardrops, with or without oral antibiotics.
- Appropriate antimicrobials will be guided by the result of the ear swab, usually available several days later.
- It is possible to achieve a dry, pain- free ear with non-surgical treatment in the majority of cases, at which point the likelihood of spontaneous healing can be assessed.

- If it is a new hole, there is a good chance that it will spontaneously heal, with a return of the ear to normal.
- A small hole is more likely to heal than a large hole.
- If the hole has persisted for months to years, an operation will be necessary to gain an in-tact eardrum.
- An operation is considered when spontaneous closure seems unlikely, and there is a desire to gain a dry, waterproof ear, with possible improvement of the hearing.
- It is not medically necessary to close an otherwise uncomplicated perforation but can become desirable from a quality of life perspective.
- If the perforation is not closed, water precautions such as an earplug when swimming will remain necessary.



Figure: An infected ear with a hole in the ear drum. There is pus coming out through the hole. The full extent of the eardrum is not visible because of a narrow ear canal.

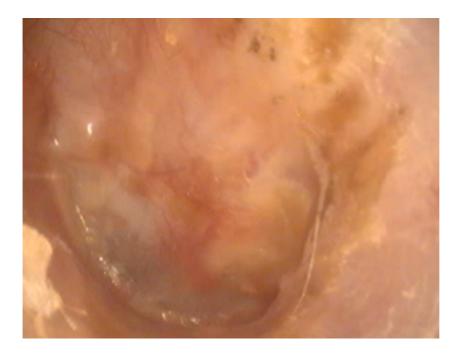


Figure: The same ear as the prior figure after successful surgery by Dr Smith with myringoplasty (repair of the hole in the ear drum), and canalplasty (drilling of the ear canal). The full extent of the eardrum is visible and is seen to be intact. The ear is dry, waterproof and free of infections.

### **SURGERY**

- This will require a general anaesthetic.
- It may be a day procedure, or require an overnight stay, depending on the individual and the extent of surgery.
- Smaller holes may be closed with a fat plug through the eardrum, or a cartilage button inserted to fill the perforation.
- Larger perforations will require an underlay graft which may be performed through the ear canal, or with a cut behind the ear if the limit of the perforation is harder to see.
- If the ear canal is very narrow, it may require widening with a drill (canalplasty).
- Overall, the surgery will close the overwhelming majority of perforations.
- If surgery is not successful at a first attempt, there is still a good chance of closing the hole with a subsequent procedure.

## **POSTOPERATIVE**

- Pain is usually easy to manage. It is likely that return to work or school will be
  possible within a few days, but in a small number of people, up to 2 weeks may be
  required to recover.
- Ideally heavy exertion/ straining should be avoided for 6 weeks, as should exposure to extreme pressure change (e.g. flying), or exposure to water.
- The ear will feel blocked with reduced hearing for some weeks, and even for several months in some cases.
- If stitches are used, they may be removed at 1 week.
- In some cases, the stitches are dissolving, and do not require removal.

- The external part of the pack (a small ribbon gauze) is taken out at that stage, and the patient is commenced on antibiotic ear drops.
- The deeper, dissolving pack (gelfoam) is then suctioned out at subsequent reviews in the following weeks.

# RISKS OF MYRINGOPLASTY

- Like all operations, there are risks associated.
- At the time of planning an operation, Dr Smith will provide a printed handout form the college of surgeons, discuss issues surrounding surgery in detail, and answer any questions you may have.