

What are the other risks of surgery?

Taste disturbance. The nerve of taste lies just under the ear drum and can be manipulated during some operations. A transient taste change can occur. This is usually described as a metallic taste along the side of the tongue on the same side as the ear being operated on. It very rarely persists beyond 3 months.

Transient facial nerve weakness. A large nerve travels through the middle part of the ear supplying the muscles of the face. Rarely anaesthetic medicines applied to the ear during surgery can cause a transient weakness of the face which recovers after a few hours. A persistent weakness of the face is considered to be exceptionally rare.

Useful post operative instructions:

Head Bandage & Ear packs. If a head bandage has been applied this should be removed after 24-48 hours. The elastoplast strips should be removed and the bandage unwound. Any steristrips over the wound should be left in place. If necessary, the cotton wool in the outer part of the ear canal can be replaced (particularly if it gets moist). Care should be taken not to disturb the packing material in the ear canal. The packing material will usually be removed in the outpatient clinic after 2 weeks.

Pain relief. Simple pain relief (paracetamol and ibuprofen) should be used regularly for the first week after surgery and then when needed until there is no ongoing discomfort.

Time off Work/School. 2 weeks recovery is usually suggested. It is not a good idea to fly for 6 weeks following surgery.

Follow up. An appointment will usually be made 2 weeks after the surgery to remove the packing material from the ear canal and to assess any wounds. Normally there is inflammation at the site of the repair and a short course of drops is usually needed for a further 1-2 weeks. Hearing tests are usually performed 6-8 weeks after surgery.



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ENT Surrey provides the very best care to patients with a wide variety of problems of the Ear, Nose and Throat. We provide services to areas in Surrey and West Sussex.

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EAR DRUM REPAIR (TYMPANOPLASTY)



This leaflet is designed to provide patients with background information about surgery to repair perforations of the ear drum (tympanic membrane) It is not intended as a replacement for the detailed discussion between you and your surgeon.



What is the tympanic membrane?

The tympanic membrane or ear drum, is a fibrous partition between the external ear canal and the middle ear. The middle ear is an air filled space containing the 3 important ear bones. Sound energy reaching the ear drum vibrates the ear bones and transfers the energy towards the inner ear. The ear drum protects the middle ear structures by providing a waterproof barrier to the outside world.

What causes a perforation?

A hole in the ear drum is known as a perforation. The commonest cause of a perforation is infection. After an ear infection results in a perforation, it usually heals on its own. However, occasionally a hole is left behind and can then only be fixed through surgery. Trauma is another cause of a perforation but these almost always heal on their own.

What problems does a perforation cause?

Recurrent infection. Infection occurs as there is a direct link to the outside world through the hole. Water, along with other substances such as soap or bathing products can enter through the hole and cause an infection. This can sometimes occur on a repeated basis.

Discomfort. Some individuals complain of discomfort if water enters the middle part of the ear through the perforation.

Hearing loss. Larger perforations can reduce the transfer of sound energy to the inner ear structures resulting in a hearing loss. The hearing loss is usual mild. Hearing loss that is more significant usually implies that there is also a problem with the ear bones. A larger operation may be required to repair the ear bones if this is the case.



What are the alternatives to surgery?

Surgery is usually suggested if an individual with an ear drum perforation is having problems with recurrent infection or if they wish to have a waterproof ear for swimming. As hearing improvement is more variable after surgery, hearing loss alone is not usually a reason for considering surgery. It is not essential to undergo surgery, particularly if the individual does not have problems with recurrent infection. If surgery is not performed then it is important to be very diligent about keeping the ear dry. Cotton wool mixed with vaseline is an excellent way to keep the ear dry when bathing. For swimming, the addition of a swimming cap or a swimmer's band is very useful. Alternatively custom made swimmer's moulds can be obtained from our audiologist.

What are the different approaches to surgery?

There are 3 main surgical approaches that can be used to repair the ear drum. Your surgeon will determine the best approach depending on the location and size of the hole as well as the dimensions of the ear canal.

Permeatal. This approach uses no external cuts (or a very small incision in front of the ear canal) and has the fastest recovery. There is usually no need for a head bandage.

Endaural. This approach involves an incision into the top of the ear canal extending into the skin just above the ear.

Post Auricular. An incision behind the ear allows excellent access to the entire ear drum. This technique is sometimes used if there are other procedures required at the same time. Some hair behind the ear may need to be removed for this approach.



How is surgery carried out?

The procedure is performed under general anaesthesia and takes between 30 and 90 minutes to perform. A graft is placed underneath or within the ear drum to act as a scaffold for the eardrum to grow on. Once the graft is in place the ear canal is packed with a material that reduces the chance of infection and keeps the repair in position. Absorbable sutures are usually used which do not need removing. Depending on the approach, a head bandage may be used which can be removed as instructed at home.

What different grafts can be used?

It is usually preferable to use a graft from the patient themselves. Cartilage and a material called fascia (obtained from the surface of the temporalis muscle above the ear) are the commonest graft materials used. Alternatively an artificial or animal graft such as Biodesign® may be used.

How successful is surgery?

A waterproof ear is obtained in approximately 90% of cases. Roughly 70% of people have a hearing improvement. About 95% of people have a reduction in infections.

What are the risks of surgery?

Infection can occur in approximately 1% of cases and may lead to failure of the procedure.

Dizziness is common and usually settles within a few hours.

Tinnitus and other strange sounds are common whilst the packing material is in place. It settles in almost all cases.

Hearing loss is theoretically possible after any form of ear surgery. It is considered to be exceptionally rare in routine ear drum repair.

