after the operation at your doctor’s surgery. There may be a small amount of discharge from the ear canal. This usually comes from the antiseptic solutions in the ear dressings.

Some of the ear dressings may fall out. If this occurs, there is no cause for concern. It is sensible to trim the loose end of the ear dressings with scissors and leave the rest in place. The dressings in the ear canal (if they are not dissolvable) will be removed after two or three weeks by your surgeon at the hospital. You should keep the ear dry and avoid blowing your nose too vigorously. Plug the ear with a cotton wool ball coated with Vaseline when you are having a shower or washing your hair. If the ear becomes more painful or is swollen then you should consult the Ear, Nose and Throat department or your GP.

Follow up
You will be advised by your surgical team.

Quick facts about a hole in the eardrum

A hole in the eardrum may need any treatment

Feeling dizzy for a few hours after the operation is common. Rarely, dizziness may last for months.

After myringoplasty your sense of taste may be different on the same side as the operation. Permanent damage is uncommon.

Your hearing may stay the same or improve after the operation. Your hearing may also become worse after the operation but this is rare.

Very rarely the facial muscles may be permanently weak after the operation. Sometimes the weakness is temporary and recovers.

Tinnitus can develop after the operation but this is uncommon.

You may have an allergic reaction to the medication in the ear dressings.

About a Hole in the Eardrum & Myringoplasty
An operation to repair a hole in the eardrum

How does the ear work?
The ear consists of the outer, middle and inner ear. Sound travels through the outer ear and reaches the eardrum, causing it to vibrate. The vibration is then transmitted through three tiny bones (called ossicles) in the middle ear. The vibration then enters the inner ear where the nerve cells are. The nerve cells within the inner ear are stimulated to produce nerve signals. These nerve signals are carried to the brain, where they are interpreted as sound.

Follow up
You will be advised by your surgical team.

Quick facts about a hole in the eardrum

A hole in the eardrum may need any treatment

Feeling dizzy for a few hours after the operation is common. Rarely, dizziness may last for months.

After myringoplasty your sense of taste may be different on the same side as the operation. Permanent damage is uncommon.

Your hearing may stay the same or improve after the operation. Your hearing may also become worse after the operation but this is rare.

Very rarely the facial muscles may be permanently weak after the operation. Sometimes the weakness is temporary and recovers.

Tinnitus can develop after the operation but this is uncommon.

You may have an allergic reaction to the medication in the ear dressings.

Disclaimer:
This publication is designed for the information of patients. Whilst every effort has been made to ensure accuracy, the information contained may not be comprehensive and patients should not act upon it without seeking professional advice.

ENT UK is the professional association for British Ear, Nose and Throat surgeons and related professionals. This leaflet provides some background information about your operation and condition. This information leaflet is to support and not to substitute the discussion between you and your doctor.

Before you give your consent to the treatment, you should ensure that you understand the benefits that you will gain from the procedure, the risks (in particular the areas that matter most to you), and go through any questions you may have with your specialist. You may change your mind about the operation at any time, and signing a consent form does not mean that you have to have the operation.

If you have any problems or questions, please contact:

Please insert local department routine and emergency contact details here

If you would like to know more, visit our website at www.entuk.org

This leaflet has been authored by Arunachalam Iyer.

ENT UK would like to thank the authors and reviewers for their contributions.

All images copyright of ENT UK except (*) used under the Generic license from Creative Commons Attribution 2.5

Last updated: July 2020. Review date: July 2021

Quick facts about a hole in the eardrum

A hole in the eardrum may need any treatment

Feeling dizzy for a few hours after the operation is common. Rarely, dizziness may last for months.

After myringoplasty your sense of taste may be different on the same side as the operation. Permanent damage is uncommon.

Your hearing may stay the same or improve after the operation. Your hearing may also become worse after the operation but this is rare.

Very rarely the facial muscles may be permanently weak after the operation. Sometimes the weakness is temporary and recovers.

Tinnitus can develop after the operation but this is uncommon.

You may have an allergic reaction to the medication in the ear dressings.

Copyright © 2021 ENT UK
A hole in the eardrum is known as a ‘perforation’. It can be caused by infection or injury to the eardrum. It can be small, medium-sized or large enough to involve the entire eardrum.

**WHAT ARE THE RISKS?**

Complications and risks are grouped in the following categories:

- **Common**: More than 1 in 10.
- **Very common**: More than 1 in 100.
- **Common**: 1 in 10.
- **Very rare**: 1 in 1,000.
- **Uncommon**: 1 in 10.
- **Very rare**: 1 in 10,000.

### Tinnitus

Some surgeons may use a small telescope with a camera attached called an endoscope. The amount of hearing loss can be determined only by careful hearing tests called an audiogram. A screen hearing loss usually means that the ossicles are not working properly, or the inner ear is damaged.

**WHAT TREATMENT MAY I NEED?**

**Conservative or non-operative management**

If the perforation is due to a recent injury or infection, a period of observation is advisable, as some of the holes can heal spontaneously. Many smaller perforations may not cause any symptoms. But it is important to prevent water getting into the ear to reduce the chance of infections.

When you are showering or bathing you can use a large piece of cotton wool covered in petroleum jelly (for example Vaseline ©) and place it in the tip of the ear to stop water getting in to your ear. Once you have finished washing you should remove the cotton wool and dispose of it.

Swimming will be difficult. Swimming earplugs are helpful, they may not stop water getting into the ear all of the time. A swimming cap may also be useful.

**WHAT IS THE BENEFIT OF HAVING SURGERY?**

The benefit of closing a perforation include prevention of water entering the middle ear and the ear behind the ear drum to reduce the chance of getting an infection and to stop the ear from leaking. It can also be done as part of a mastoid operation (see leaflet on mastoid surgery). Repairing the eardrum alone seldom leads to great improvement in hearing.

### WHAT HAPPENS AFTER THE OPERATION?

- **What problems can develop with a hole in the eardrum?**
  - Quite often a hole in the eardrum may heal itself. Sometimes it does not cause any problem. However, if a hole in the eardrum may cause a discharge from the ear. If the hole in the eardrum is large, then your hearing may be reduced.

- **What symptoms may I develop?**
  - Many of the smaller holes may not cause any problems. But you can develop recurrent infections, discharge from the ear (especially if you get water into your ears), and hearing loss.

- **Will I need any tests?**
  - You will need an examination by an otolaryngologist (ear, nose and throat specialist) to rule out any hidden infection behind the perforation. The hole in the eardrum can be identified using a special medical instrument called an ‘otoscope’. It consists of a magnifying lens and a light. Examination with the otoscope is usually pain-free. Sometimes more detailed examination is carried out using a microscope and suction (a small vacuum cleaner).

- **Some surgeons may use a small telescope with a camera attached called an endoscope. The amount of hearing loss can be determined only by careful hearing tests called an audiogram. A screen hearing loss usually means that the ossicles are not working properly, or the inner ear is damaged.**

- **WHAT ARE THE ALTERNATIVES TO SURGERY?**
  - If the hole in your eardrum is not causing any symptoms (such as discharge from ear, hearing loss or recurrent infections), you may decide not to undergo the surgery. The operation may not be able to cure your hearing loss and you may need to take precautions to avoid water getting into the ear in order to minimise the chance of infection.
  - Recurrent discharge and infections may be treated by regularly cleaning the ear under a microscope and by using antibiotic drops. If your perforation is affected and you do not wish to have surgery, you may wish to consider hearing aid.

- **WHAT ARE THE RISKS?**
  - Are there any complications after this operation?

- **Complications and risks are grouped in the following categories:**

- **Very common**: More than 1 in 10.
- **Common**: More than 1 in 100.
- **Uncommon**: 1 in 10.
- **Rare**: 1 in 1,000.
- **Very rare**: 1 in 10,000.

- **Tinnitus**: Sometimes you may notice an extra noise in the ear following surgery. This is called tinnitus and occurs in particular if the hearing loss worsens. This is uncommon.

- **Facial Paralysis**: The nerve which moves the muscles of the face runs through the ear. There is therefore a slight chance of temporary facial paralysis after ear surgery. However permanent facial paralysis following a myringoplasty operation is very rare. The facial nerves affect the movement of the facial muscles helping to close the eye, smiling and raising the forehead. The paralysis could be partial or complete. It may occur immediately after surgery or days or weeks later. Recovery can be complete or partial.

- **Allergic reaction**: to the medication in the ear dressings. Some patients may develop a skin reaction to the ear dressings. If your ears become itchy or swollen, you should seek advice from your surgeon. The ear dressings contain medication to prevent infection.

- **General anaesthetic**: The operation is usually performed under a general anaesthetic. Complications include blood clots in the legs (deep vein thrombosis) or lungs (pulmonary embolism), heart attack, chest infection, stroke and death. The rare assessment hours and anaesthetist will explain to you what occurs during a general anaesthetic and the associated risks that are relevant to you. The text below summarises the common risks and risks.


- **WHAT HAPPENS AFTER THE OPERATION?**
  - **What happens after the operation?**
    - After the operation, you will be transferred to the recovery area. When your anaesthetist has woken you, you will be taken back to the ward or day case unit.

- **How long will I stay in hospital?**
  - Many hospitals are doing myringoplasty as day surgery and you will be discharged once the operating team is satisfied that you have recovered from the anaesthetic.
  - If for any reason, there is a complication following surgery, then you might need to stay in hospital for longer.

- **What is the recovery period?**
  - **Recovery time may vary a few days.** The exact time needed off work varies between patients, but as a guide you may need to take up to one or two weeks off work.

- **What is the success rate?**
  - The operation can successfully close a small hole nine times out of ten. The success rate is not good if the hole is large. Other factors such as smoking can affect the success rate.

- **What else should I expect after surgery?**
  - The ear may ache a little but this can be controlled with paracetamol. You may have a head bandage. If you do, you will usually go home after the head bandage has been removed. The stitches will be removed one to two weeks