

Dr Anton C van Lierop

MB.,Ch B (Stell) FCORL (SA) M Med (ORL) (UCT)

Oor, Neus en Keel Spesialis Ear, Nose and Throat Specialist

Pr. nr: 0251828



74 Berlynstreet
Paarl
7646

Tel: 021 872 7472
Fax: 021 872 3599
Cell: 083 234 1902

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 reach the eardrum, causing it to vibrate. The vibration is transmitted through three tiny bones (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.

What is a hole in the eardrum?

A hole in the eardrum is known as a “perforation”. It can be caused by infection or injury to the eardrum. Quite often a hole in the eardrum may heal itself. Sometimes it does not cause any problem. However a hole in the eardrum may cause a discharge from the ear. If the hole in the eardrum is large, then the hearing may be reduced.

How is the condition diagnosed?

The hole in the eardrum can be identified using a special instrument called an otoscope. You will need an examination by an otolaryngologist (ear, nose and throat specialist) to rule out any hidden infection behind the perforation. The amount of hearing loss can be determined only by careful hearing tests. A severe hearing loss usually means that the ossicles are not working properly, or the inner ear is damaged.

How can a hole in the eardrum be treated?

If the hole in the eardrum has only just occurred, no treatment may be required. The eardrum may simply heal itself. If an infection is present you may need antibiotics. You should avoid getting water in the ear. A hole on the eardrum that is not causing any problems can be left alone. If the hole in the eardrum is causing discharge or deafness, or if you wish to swim, it may be sensible to have the hole repaired. The operation is called a “myringoplasty”. You should discuss with me whether to wait and see or have surgery now.

Aims of the operation

The benefits of closing a perforation include prevention of water entering the middle ear while showering, bathing or swimming (which could cause ear infection). It can be done as part of a mastoid operation (see leaflet on mastoid surgery). Repairing the eardrum alone seldom leads to great improvement of hearing. 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 would like to have a second opinion about the treatment you can ask your GP.

How is the operation done?

A cut is made behind the ear or above the ear opening. The material used to patch the eardrum is taken from under the skin. This eardrum “graft” is placed against the eardrum. Dressings are placed in the ear canal. You may have an external dressing and a head bandage for a few days. Occasionally, I may need to widen the ear canal with a drill to get to the perforation.

How successful is the operation?

The operation can successfully close a small hole nine times out of ten. The success rate is not quite so good if the hole is large.

Possible complications

There are some risks that you must be aware of before giving consent to this treatment. These potential complications are rare.

- The taste nerve runs close to the eardrum and may occasionally be damaged. This can cause an abnormal taste on one side of the tongue. This is usually temporary but occasionally it can be permanent.
- Dizziness is common for a few hours following surgery. On rare occasions, dizziness is prolonged.
- In a very small number of patients, severe deafness can happen if the inner ear is damaged.
- Tinnitus: Sometimes the patient may notice noise in the ear, in particular if the hearing loss worsens.
- Facial paralysis: The nerve for the muscle of the face runs through the ear. Therefore, there is a slight chance of a facial paralysis, but this is highly unlikely.
- Reaction to ear dressings: Occasionally the ear may develop an allergic reaction to the dressings in the ear canal. If this happens, the pinna (outer ear) may become swollen and red. You should consult me so that I can remove the dressing from your ear. The allergic reaction should settle down after a few days.

What happens after the operation?

The ear may ache a little, but this can be controlled with painkillers provided by the hospital. You will usually go home the day after the operation, or sometimes the same day. The stitches will be removed one to two weeks after the operation. There may be a small amount of discharge from the ear canal. This usually comes from the ear dressings. Some of the packing may fall out. If this occurs there is no cause for concern. It is sensible to trim the loose end of packing with scissors and leave the rest in place. The packing in the ear canal will be removed after two weeks.

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 your general practitioner or me. You may need to take two to three weeks off work.