

Information for patients and carers

Mastoid Surgery

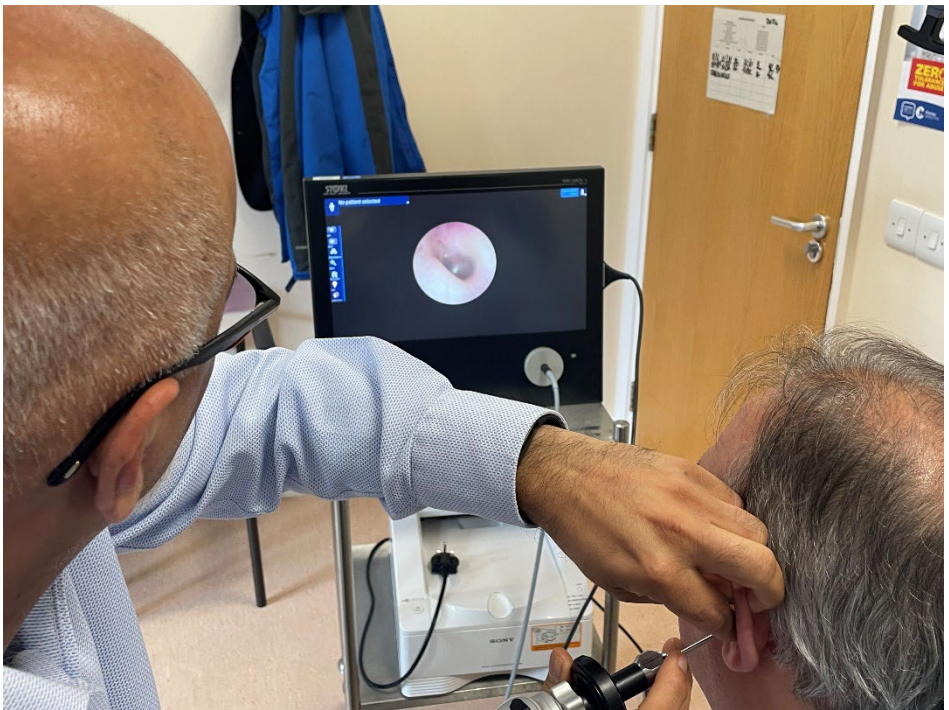
A decorative graphic at the bottom of the page consisting of three overlapping, wavy bands of blue. The top band is a light blue, the middle is a medium blue, and the bottom is a dark blue.

Welcome to ENT (Ear, Nose & Throat)

This leaflet has been produced to answer questions you may have about having mastoid surgery and what to expect during your visit. If you have any other questions, please ask your surgeon or a member of the nursing team.

What is a mastoid bone?

The mastoid is a bony area that can be felt just behind the ear. Consisting of many small air pockets, it connects to an area in the middle ear. The mastoid regulates pressure in the middle ear and protects the inner ear. Diseases of the middle ear can extend to the mastoid bone.



Why do I need Mastoid surgery?

There are several reasons you need to have mastoid surgery. You may have a painful, swollen or discharging ear that is not getting better, or you may have some deafness that is limiting your everyday activities. Mastoid surgery may also be required to provide access for other operations such as cochlear implant surgery. For some patients, they may have very few complaints, but the surgeon may suspect disease. The most common reason for mastoid surgery is a condition called a "cholesteatoma".

What is a Cholesteatoma?

A cholesteatoma is a noncancerous collection of dead skin cells in the middle ear. This can appear when the ear drum has been sucked into the middle ear and the skin cells from the outer ear accumulate in the pocket created. A cholesteatoma may have developed following lots of ear infections, or a poorly functioning eustachian tube which may have been there since birth. A eustachian tube is a tube that leads from the back of the nose to the middle ear.

What if I decide not to have surgery?

If left untreated, over time, a cholesteatoma grows and can cause complications that range from mild to severe. A cholesteatoma can destroy the little bones in the middle ear causing complete deafness. Facial nerves can be damaged causing half of the face to be paralysed. The cholesteatoma can also grow backwards into the honeycomb-like bone called the mastoid bone. The bone between the ear and the brain is very thin and can also be destroyed which may then cause life-threatening illnesses such as meningitis and brain abscesses.

What happens before the surgery?

You will have a hearing test to confirm the state of your hearing. The surgeon will carefully examine your ear with a handheld instrument called an otoscope and they may also use a microscope so they can see the ear more thoroughly.

If there are no signs of an obvious cholesteatoma the surgeon may want you to have a CT scan or an MRI scan. Once a cholesteatoma is diagnosed, the surgeon will explain the risks and benefits of surgery and if you agree, you will sign a consent form and a plan will be made for surgical removal.

How is a Mastoidectomy performed?

Mastoid surgery is also called a mastoidectomy and is always performed under a general anaesthetic and takes between 1-3 hours to complete. In most cases the procedure is done as a day case. A small number of patients may have to stay overnight but this will be discussed with you by your surgeon.

The skin is cut behind the ear or up from the ear canal in front of the ear. The bone behind the ear (the mastoid bone) is then removed using a drill. The cholesteatoma is carefully removed from the surrounding structures. The back wall of the ear canal may need to be removed which will create a mastoid cavity.

This operation is called a "modified radical mastoidectomy." The eardrum usually needs to be repaired using a graft of muscle sheath and this is called a tympanoplasty. The ear canal is sometimes widened to improve access to the mastoid cavity.

Once the operation has been completed, the cavity and canal are packed with a yellow ribbon. This allows healing without scar tissue narrowing the canal and can be left for 3-4 weeks.

Are there any other options?

In more limited disease, an "atticotomy" may be performed. An atticotomy involves leaving the back wall of the ear canal intact and only the small area where the cholesteatoma has started is removed. Cartilage from the ear may be used to rebuild this area.

What about afterwards?

You will wake up with a bandage around your head which you can remove the following day. You will need two weeks off work or school and the nursing staff will provide you with a 'Fit Note' if needed. The stitches in the skin dissolve and do not need removal. The yellow ribbon is removed after 3-4 weeks in the ENT outpatient clinic.

What are the risks of surgery?

As with all operations, there is an element of risk involved which you will be made aware of before you sign the consent form. The surgery is considered very safe, and these problems are unlikely to occur. You can expect a temporary hearing loss.

The surgeon is careful when using a microscope to identify structures, but the surgery may damage the same structures as the cholesteatoma. There is a risk of permanent hearing and balance problems. The nerve that controls your face passes through the middle ear and there is a risk of facial paralysis. Some patients may develop tinnitus, which is a ringing noise in the ear. If the cavity remains moist or is discharging, revision surgery may be needed in the future.

What happens later?

Regular follow up and cleaning of the cavity is needed so you will be referred to the specialist nurse led aural care team by the surgeon. Your hearing will be retested when the cavity has healed. If the ear begins to leak fluid, please ask for an antibiotic spray or drops from your GP and if this does not settle, please contact the hospital to have your outpatient appointment brought forward.

What do I do if I am worried?

If you have any worries at all about the state of your ear, the wound or the effects of your medication, please telephone the ward where you were a patient for advice from the nursing staff.

Pre-operative and post-operative advice

Pre-operative advice

Please stop eating 6 hours before your operation. Stop drinking 2 hours before your operation and only drink water up to this time. No milk products are to be drunk. Please bring an up-to-date list of medications. If you have been given the consent form, please bring this with you, but do not sign it.

Please write down any questions/concerns that you have. If going home on the same day, please make sure there is an adult staying with you for 24 hours after your operation.

Post-operative advice

After your operation you will be transferred to the day case ward where you will rest until the anaesthetic has worn off. If you were informed that you will need an overnight stay, you will be transferred to an inpatient ward. You will normally be discharged 2 hours after

your operation however, you must achieve some set goals before you can leave, such as being able to eat and drink and getting out of bed.

You may be dizzy after the operation so care must be taken and do not attempt to get out of bed yourself without someone being with you.

The head bandage can be removed after 24 hours. You may have some cotton wool in your ear, and this can be replaced when soiled. You **MUST NOT** remove any dressings that have been inserted.

After the surgery it is important to keep your ear dry to help with healing. Avoid swimming and putting your head under the water when having a bath until healing is complete.

When having a shower, you are advised to put cotton wool covered with Vaseline® in the ear to stop any excess water getting in and it should be removed immediately afterwards. If there is an incision behind the ear, this can get wet 48 hours after surgery. You will need to do this until your ear has healed.

Avoid any contact sports or strenuous activities for 2 weeks following surgery.

You will experience some pain or swelling in the ear or head. A prescription for pain medication may be provided. If you have difficulty controlling the pain, please contact Ward 3 for adult patients or Ward 8 for children.

Do not blow your nose hard, instead gently clear one nostril and then the other and try to sneeze with your mouth open to reduce the pressure.

Any dizziness usually passes after a few days however if it continues or gets worse or you are feeling sick, please see your GP or contact the ward you were discharged from. You must not drive or operate machinery until you are safe enough to do so.

It is normal to have a sensation of pressure, have a feeling of fullness or hear crackling or popping noises within the ear. It is also normal to have a metallic taste in your mouth as the taste nerve runs close to the eardrum and may have become bruised or damaged during the procedure. This is usually temporary.

You will be seen back in the ENT outpatient's department several weeks after your procedure to have your ear dressing removed.

Once your ear has settled down from surgery you will also have another hearing test.

Frequently asked questions

How many people will be in the procedure room?

Two doctors along with 2-3 trained nurses and a healthcare assistant will be in the room. There are often extra doctors or nurses in the room that are there to learn.

How long will I be in hospital?

Most people can return home on the same day, but some may have to stay in hospital; this would normally be discussed with you prior to the procedure.

Can I change my mind if I have already agreed to surgery?

You can change your mind about having an operation at any time. Signing a consent form does not mean that you must go through with the operation.

Contact details

For post operative concerns following your procedure please contact Ward 3 or Ward 8 via the switchboard on **01772 716565**.

Sources of further information

www.lancsteachinghospitals.nhs.uk

www.nhs.uk

www.accessable.co.uk

www.patient.co.uk

www.entuk.org

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www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

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If you want to stop smoking, you can also contact Smokefree Lancashire on Freephone **08081962638**

Please ask a member of staff if you would like help in understanding this information.

This information can be made available in large print, audio, Braille and in other languages.

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