The Children’s Hospital

Repair of a Perforated Eardrum (Myringoplasty)

Information for parents
What is a perforated eardrum?

A perforated eardrum means there is a hole in the eardrum. This may have been caused by infection or injury.

Quite often, a hole in the eardrum will heal itself. However, it may cause recurrent infections with a discharge from the ear. If your child has an infection, they should avoid getting water in the ear. If the hole is large, your child may experience some hearing loss.

A hole in the eardrum can be identified by a doctor or nurse specialist using an instrument called an auroscope. If the hole in the ear drum is causing discharge or deafness your surgeon may recommend that the hole is repaired.

What is a myringoplasty?

A myringoplasty is an operation to repair the perforation in the eardrum.

What are the benefits of the operation?

The benefits include:

• Preventing water from entering the middle ear, which would cause ear infection.
• Fewer ear infections.
• May result in improved hearing (but repairing the eardrum alone seldom leads to great improvement in hearing)
• An operation may be performed on the bones of hearing, if necessary, at a later date
• The operation can successfully close a small hole nine times out of ten. The success rate is not as good if the hole is large

What are the risks?

Your child may experience some taste disturbance, as 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 the surgery. On rare occasions, dizziness is prolonged.

Your child may hear noise in the ear (tinnitus).

The nerve for the muscle of the face runs through the ear. Therefore, there is a slight chance of a facial paralysis. This affects the movement of the facial muscles for closing the eye, smiling and raising the forehead. The paralysis can be partial or complete. It may occur immediately after surgery or have a delayed onset. Recovery can be complete or partial.

Total and permanent deafness in the operated ear is a very rare but serious risk.

The doctor will discuss these risks with you in more detail.

Are there any alternatives?

There are no alternative treatments. Some ENT surgeon may suggest hearing aids if your child has not experienced problems with ear infections.
Consent

We will ask you for your written consent for the operation to go ahead. If there is anything you are unsure about, or if you have any questions, please ask the doctor before signing the consent form.

How is the operation done?

The operation is done under a general anaesthetic, normally as a day case. Your child will be asleep throughout.

In the anaesthetic room

A nurse and parent can accompany your child to the anaesthetic room. Your child may take a toy.

It may be possible to give the anaesthetic with your child sitting on your lap. Your child can either have anaesthetic gas to breathe or an injection through a cannula (a thin plastic tube that is placed under the skin, usually on the back of the hand). Local anaesthetic cream (EMLA or Ametop, sometimes known as ‘magic cream’) can be placed on the hand or arm before injections so they do not hurt so much. It works well for 9 out of 10 children.

If the anaesthetic is given by gas, it will take a little while for your child to be anaesthetised. They may become restless as the gases take effect.

If an injection is used, your child will normally become unconscious very quickly indeed. Some parents may find this frightening.

Once your child is asleep, you will be asked to leave promptly. Your child will then be taken into the operating theatre to have the operation or investigation. The anaesthetist will be with your child at all times.

Anaesthetic risks

In modern anaesthesia, serious problems are uncommon. Risk cannot be removed completely, but modern equipment, training and drugs have made it a much safer procedure in recent years. Throughout the whole of life, an individual is at least 100 times more likely to suffer serious injury or death in a road traffic accident than as a result of anaesthesia.
Most children recover quickly and are soon back to normal after their operation and anaesthetic. Some children may suffer side effects like sickness or a sore throat. These usually last only a short time and there are medicines available to treat them if necessary.

The exact likelihood of complications depends on your child’s medical condition and on the nature of the surgery and anaesthesia your child needs. The anaesthetist can discuss this with you in detail at the pre-operative visit.

What happens during the operation?

A cut is made behind the ear or above the ear opening. Some material or tissue is needed to patch the eardrum, and this is taken from under the skin in front of the ear (tragus). This eardrum ‘graft’ is placed against the eardrum. Dressings are placed in the ear canal. Your child may have an external dressing and a head bandage for a few hours.

After the operation

Your named nurse will make regular checks of your child’s pulse, temperature and wound and also make sure that your child has adequate pain relief until you are discharged home (Please see our separate pain relief leaflet).

Recovery from the anaesthetic

Once your child is awake from the anaesthetic they can start drinking, and if they are not sick they can start eating their normal diet.

The minimum recovery time before discharge is 4 hours. Your child cannot go home on public transport after a general anaesthetic.

Occasionally, the anaesthetic may leave your child feeling sick for the first 24 hours. The best treatment for this is rest and small, frequent amounts of fluid. If the vomiting persists for longer, please contact your GP.

Dizziness is common for a few hours following the surgery. On rare occasions, dizziness is prolonged.
The hospital experience is strange and unsettling for some children so do not be concerned if your child is more clingy, easily upset or has disturbed sleep. Just be patient and understanding.

**Wound care and hygiene**

The ear and suture line (where the wound has been stitched) should be kept clean and dry. It is important that the internal packing is not disturbed, and this will be removed at the follow-up appointment. If any of the packing falls out of the ear, cut it without removing any more. Renew the cotton wool protecting the internal packing if it becomes soiled.

The cotton wool may need changing frequently for the first 48 hours, and then only when it becomes soiled, falls out or when you administer ear drops.

**How to administer ear drops**

- Wash your hands
- Take out the old cotton wool
- Lay you child on his/her side and put 2 drops into the ear; let the drops soak into the dressing.
- Place a clean piece of cotton wool into the ear.
- Do not add more cotton wool without removing the old piece.
- Keep using the drops until your outpatient appointment for dressing removal 2 - 3 weeks after the surgery. If you stop using the drops the dressing may become hard and difficult to remove.

There are no stitches to be removed; they will dissolve on their own. The paper strips can be removed one week after surgery and the wound washed with normal soap and water, but please continue to keep water out of the ear itself.

**Follow-up care**

You will be given some ear drops to use at home.

Your child may experience some ear ache for a few days which should
gradually get better. (See our separate pain relief leaflet.) Please have adequate Paracetamol and Ibuprofen at home.

You will be given an outpatient appointment in 2 - 3 weeks time for the internal packing to be removed.

Your child should keep his /her ear completely dry until after the surgeon has checked it is safe to let water into your child’s ear.

**Getting back to normal**

Your child will benefit from extra rest for a few days after the operation. S/he should remain home from school for 7-10 days.

Until the surgeon has checked that your child’s ear has healed your child should avoid the following:

- any exercise and sports
- blowing his or her nose too vigorously or sneezing violently
- swimming.

**Contacts and telephone numbers**

If you have any questions or concerns, or you are worried about your child, you can telephone the wards for advice.

Your named nurse is .................................................................

John Radcliffe Hospital Switchboard:  (01865) 741166
Children’s Day Care Ward: (01865) 234148
Robin’s Ward: (01865) 231254 / 5
Tom’s Ward: (01865) 234108 / 9
Drayson Ward: (01865) 231237

**Further information**

www.entuk.org (British Association of Otorhinolaryngologists)

www.rcoa.ac.uk
Please bring this leaflet with you on the day of your child’s admission.

We hope that this information is useful to you and would welcome any comments about the care or information you have received.

If you need an interpreter or need a document in another language, large print, Braille or audio version, please call 01865 221473 or email PALSJR@orh.nhs.uk