



Manchester University
NHS Foundation Trust

Royal Manchester Children's Hospital

Paediatric Otorhinolaryngology (ENT)

Emergency Mastoidectomy

Information for Parents, Carers and Patients

Consultant:

Tel:





What is the mastoid?

Your mastoid is the bone you can feel just behind your ear. It contains air filled spaces giving it a honeycomb appearance. It connects with the air spaces of the middle ear. For this reason, infections or other conditions affecting the middle ear can spread into the mastoid bone

What is a mastoidectomy?

A mastoidectomy refers to a surgical procedure carried out to remove part or all of the mastoid bone. Most commonly in an emergency, your child will have a mastoiditis (infection of the mastoid bone), usually in response to a middle ear infection

Does my child need to have the procedure?

Not all children with mastoiditis need surgery. Some infections respond well to intravenous antibiotics and no surgery is required. However, if your child's infection does not respond to intravenous antibiotics or if your child has evidence of a complication from this infection, surgery is recommended. In these instances, failure to operate may lead to further spread of the infection to the surrounding structures including the brain. This may lead to infection of the lining of the brain (meningitis), a collection of pus in the brain (abscess) or clots in the brain (thrombosis).

What will happen on the day of the procedure?

You have either brought your child to our hospital or have been transferred from your local district general for treatment. Your child will have been started on antibiotics into the vein and may also have fluids if not eating.

In most cases your child will require a CT scan of their head to assess the infection and how far it has spread. Where possible, this is done prior to surgery. The surgeon/advanced practitioner will explain this procedure





and take consent. The scan will be done under sedation and therefore your child will not be allowed food/milk or drink. Your child will also not be allowed to eat and drink before the surgery. The ward nurses will inform you of when to stop feeding your child.

If there is a long delay for the scan or if your child is very unwell, it may be that your child is taken to theatre for the procedure without a scan and will then only have a scan if they do not improve as expected after the surgery.

Your surgeon will explain the procedure and answer any questions you may have.

As the mastoidectomy is performed under a general anaesthetic, your child will also be reviewed by an anaesthetist on the day of surgery. They will be able to answer any questions you may have relating to the general anaesthetic.

All emergency cases are done of the emergency list. This list can be very busy and there may sometimes be delays. This can be frustrating for you but please be assured that the doctors and nurses are doing their best to get your child to theatre as soon as it is safe and possible to do so.

Once your child is asleep, the procedure takes approximately 2 hours. The surgeon makes an incision behind your child's ear to drain the pus and remove the diseased portion of the mastoid bone. The incision is then closed with dissolvable stitches and a small drain is left to drain any further pus that may develop.

The drain remains in place 24-48 hours and will be removed once there is minimal drainage.

What are the benefits of this procedure?

The main aim of surgery is to remove any pus and infected bone to prevent the infection from spreading and causing the more serious complications of mastoiditis discussed above





What are the risks of this procedure?

As with all surgery, a mastoidectomy is associated with some risks. These include:

- Bleeding (some blood stained discharge from the ear for 1-2 weeks after surgery is not uncommon)
- Altered taste (the nerve which supplies taste sensation runs close to the eardrum and can sometimes be damaged. If so, this is normally temporary but it may be permanent)
- Dizziness (if present, this is usually temporary)
- Ringing in the ear also known as tinnitus (if present, this is usually temporary)
- Damage to the facial nerve as it runs through the middle ear (this may occur immediately after surgery or after a few days. This may be temporary or permanent. During the operation, your child's facial nerve will be monitored throughout to minimize the risk of damage)
- Total and permanent hearing loss (this is a very rare complication of surgery)
- Leakage of brain fluid (again this is a very rare complication of surgery)
- There is a very small risk with any anaesthetic. However, modern anaesthetics are very safe

It is important to state that if left untreated, mastoiditis and its complications may cause any or all of the issues above



What should I expect when my child returns to the ward?

Your child may be still quite drowsy due to the anaesthetic but this is quite normal and they may sleep for a while.

Your child can drink as soon as they are awake. Nursing staff will advise you when your child may eat.





It is quite common after ear surgery for children to feel dizzy and sick. The ward nurses will manage this and give anti sickness medications as needed to help your child.

Your child will have a head bandage in place covering the ear. This will remain in place until the surgeons remove it the following day to check the wound site and drain. A smaller dressing can then be applied to secure the drain. Once the drain is completely removed there is no need for a dressing.

Will my child have any pain following the operation?

It is normal after surgery for your child to experience some ear pain. The ward nurses will manage your child's pain and give analgesia regularly. It will likely be required whilst the drain is in and up to 3 days post procedure.

If your child is still requiring pain relief medication at discharge your nurse will inform you of the time they last had medication.

How long will my child be in hospital?

This will depend on whether your child has developed any complications of mastoiditis.

- If the CT scan highlighted any brain swelling/infection then your child will need a longer course of antibiotics into the vein. This could be anywhere from 6- 12 weeks. Ward staff will contact the local community team and arrange for the antibiotics to be given at home. This can take time to arrange. Your child will also need a more long term IV line in their vein to allow for these antibiotics to be given. These lines can be inserted under sedation or general anaesthetic. Your surgeon/nursing staff will discuss this with you if required.
- If the scan highlighted the presence of a blood clot, your child may need to be reviewed by the Neurology team. Depending on their review, your child may be started on medication to thin the clot. This medication is given by injections twice a day for about 3 months. The dose will need to be adjusted until at a safe level. You will also need to be trained to give this injection or it can be done by



community. Again, your surgeon/nursing staff will discuss this with you if required

- If your child has no further complications, the drain will be removed 1-3 days after the procedure. Your child will need to complete the course of intravenous antibiotics recommended by the Microbiology team. Providing they are well at the end of this, they will often be discharged with a follow-up course of oral antibiotics. Again, the duration of this will be discussed with the Microbiology team as every case is different.

Is there anything I need to watch for when my child goes home?

Your child may still have some pain associated with the wound site which should be manageable with over-the-counter pain relief.

If your child develops a temperature and/or redness, swelling or oozing from the wound site, you will need to take them to your local emergency department to be reviewed.

If your child starts to become irritable, drowsy or disorientated, it is important to seek urgent medical advice.

If your child has a line for antibiotics then you will have a leaflet explaining how to care for this. Observe for signs of increased pain, swelling and redness at the line site. Speak with your community team if you are worried as they will be checking the line daily when giving the antibiotics.

When can my child go back to school?

Your child can go back to school/nursery once you feel they are back to normal. You may need to liaise with school if your child has an IV line for the antibiotics as they may need to take other precautions.

Will my child need to be seen at the hospital again?

Your child will be given an appointment within 2-4 weeks after the operation. At that stage, your doctor will discuss the timeline of any further follow up that is required.



If your child is unwell in anyway when they are due to come into hospital, please contact the Admissions Department for advice.

If you are worried about anything or require further information please contact the ward.

Covid and surgery

It is likely that having an operation while carrying the Covid-19 virus causes an additional risk of developing complications. How much of a risk this is in children remains unclear. Whilst we are awaiting more details around this, we have taken precautions both prior to admission as well as during hospital stay to limit the risk of Covid-19 in the peri-operative period.

Questions

We understand that there may be questions that either you or your child would like answering. Most of us forget what we were going to ask the doctor or the nurse.

Please write your questions below.

No Smoking Policy

Please protect our patients, visitors and staff by adhering to our no smoking policy. Smoking is not permitted in any of our hospital buildings or grounds, except in the dedicated smoking shelters in the



grounds of our Hospital site.

For advice and support on how to give up smoking, go to www.nhs.uk/smokefree.

Translation and Interpretation Service

It is our policy that family, relatives or friends cannot interpret for patients. Should you require an interpreter ask a member of staff to arrange it for you.

تنص سياستنا على عدم السماح لافراد عائلة المرضى او اقاربهم او اصدقائهم بالترجمة لهم. اذا احتجت الى مترجم فيرجى ان تطلب ذلك من احد العاملين ليرتب لك ذلك.

بماری یہ پالیسی ہے کہ خاندان ، رشتہ دار اور دوست مریضوں کے لئے ترجمہ نہیں کر سکتے۔ اگر آپ کو مترجم کی ضرورت ہے تو عملے کے کسی رکن سے کہیں کہ وہ آپ کے لئے اس کا بندوبست کر دے۔

ইহা আমাদের নীতি যে, একজন রোগীর জন্য তার পরিবারের সদস্য, আত্মীয় বা কোন বন্ধু অনুবাদক হতে পারবেন না। আপনার একজন অনুবাদকের প্রয়োজন হলে তা একজন কর্মচারীকে জানান অনুবাদকের ব্যবস্থা করার জন্য।

Nasze zasady nie pozwalają na korzystanie z pomocy członków rodzin pacjentów, ich przyjaciół lub ich krewnych jako tłumaczy. Jeśli potrzebują Państwo tłumacza, prosimy o kontakt z członkiem personelu, który zorganizuje go dla Państwa.

Waa nidaamkeena in qoys, qaraabo amaasaaxiiboaysanu tarjumikarinbukaanka. Haddiiaad u baahatotarjumaankacodsoxubinka mid ah shaqaalahainaykuusameeyaan.

我们的方针是，家属，亲戚和朋友不能为病人做口译。如果您需要口译员，请叫员工给您安排。



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