Stapedectomy (middle ear repair)

Royal Berkshire NHS Foundation Trust

This leaflet covers stapedectomy (middle ear) surgery. If there is anything you do not understand or if you have any concerns, please speak to your doctor.

What is a stapedectomy?

This is an operation to remove part of the fixed stapes bone in the middle ear and replace it with a small teflon piston (normally 4.5mm long). In more than 90% (9 in 10) of cases, the hearing is improved. In about 5% of cases the hearing is about the same. And in up to 5% (1 in 20) cases the hearing could be worse or even go altogether on the operated side.

What happens during the operation?

The operation is performed by operating down the ear canal although in about 5% of cases the ear canal is too narrow and a small incision is made in front of the ear to facilitate the surgery. The ear drum is lifted up and the stirrup part of the stapes bone is removed using either a purpose designed micro drill or a laser. A hole is then drilled or lasered through the baseplate of the stapes for the artificial piston to sit in. Before the piston is put in the hole a small segment of vein (taken from the back of the hand) is placed over the hole to stop inner ear fluid from escaping. The piston is then placed over the vein graft and into the hole. Although the vein technique is technically more demanding your consultant believes it gives a safer long term result. Surgery is normally performed under general anaesthetic (you are asleep).

What are the possible side effects?

1. There is a very small chance of the hearing getting worse or going altogether.
2. There is a small chance of tinnitus. If you already have tinnitus, it often gets better, although sometimes it stays the same and rarely, may get worse.
3. There is often short lived (48 hours) vertigo (dizziness), although rarely, this could last longer.
4. The nerve that supplies taste to the front of the tongue on the operated side runs through the area of surgery and occasionally this needs to be stretched or is cut. If this happens, some people notice nothing unusual, others have a slight metallic taste at the front of the tongue and others are aware of decreased sensation and taste. This normally improves over time, especially if the nerve has just been stretched.
5. Very rarely, the ear drum may get a small tear when being lifted. This would be repaired during the same operation.
6. The facial nerve, which is responsible for movement of the facial muscles, runs very close to the area of surgery. There have been reports of this being damaged during surgery (one of the reasons for the 5% (1 in 20) group of those who have no change in their hearing after surgery is that if the nerve is abnormally close to the area of drilling, so the operation is stopped, hence no hearing change. Advice will then be to get a hearing aid).

Is there an alternative to surgery?

- An alternative to this procedure is a hearing aid. If you would like more information about this, please speak to your consultant.
- There is also the option of not receiving any treatment at all. The consequences of not receiving any treatment are that you will have no improvement in your hearing loss.

What can I expect after surgery?

- The surgery is not normally painful. If you have any discomfort, please take your regular painkillers (such as paracetamol or ibuprofen), following dosage instructions.
- Most patients go home the same or next day. If you have a head bandage on, this will normally be removed before you leave the ward.
- A small sponge tampon is left in the ear canal for one week to protect the ear drum while it is healing. You will be given antibiotic ear drops to use twice a day to keep the sponge moist and prevent infection. Your surgeon will remove this at your follow-up appointment.
- **It is important to keep the ear dry.** Washing hair after the surgery should be done while keeping the ear dry. A piece of cotton wool coated in Vaseline can be placed in the ear opening.

What activities can I do following surgery?

- **First two weeks:** Because the inner ear has been opened, it is important to take it very easy for the first two weeks to stop a leak of fluid from the inner ear (inner ear pressure rises with straining). No straining or grunting, i.e. no lifting, getting constipated, pushing lawnmowers, squatting etc. Going out for a walk is fine. No driving until you are confident that you can turn your head very quickly with no unsteadiness.
- **Next two weeks:** Gentle lifting, gym work is gentle bicycle only. Gentle golf, i.e. putting only. At one month: Back to full physical activity. **After stapedectomy you should never scuba dive.**
- **Work:** If you can work from home you can do this a few days after surgery but do not go back to the office for one week (increased exertion and risk of catching a cold). If you have a manual job see instructions above. You will be able to get a fit note for your employer from your nurse prior to leaving hospital but please let them know that you need this. Further fit notes can be issued by your GP, if necessary.
- **Flying:** To be absolutely safe, **no flying for five weeks after surgery**. Eurotunnel is probably safe after four weeks following surgery.

Follow-up

You will normally have a follow-up appointment approximately one week following surgery. We will send you a letter in the post confirming the date of the appointment.

Concerning post-operative symptoms to look out for

Contact the ward if you have any of the following:

- A temperature of more than 38.5 C.
- A severe headache not responding to over-the-counter painkillers.
- Severe vertigo (dizziness) or vomiting.
- Facial weakness.
- Sudden complete loss of hearing.

How to contact us

Dorrell Ward Tel: 0118 322 7172 or 0118 322 8101

Lion and Dolphin Ward (Children) Tel: 0118 322 8105

Clinical Admin Team (CAT1) (Monday to Friday, 9am to 4pm) Tel: 0118 322 7139 or email rbbh.CAT1@nhs.net

ENT Outpatient Department (Townlands) reception: 01865 903274

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

RBFT ENT Department, November 2022.
Next review due: November 2024