Portsmouth Hospitals NHS
NHS Trust

Stapedectomy surgery

Information for patients

Patient's name:

Side of operation: Right Left

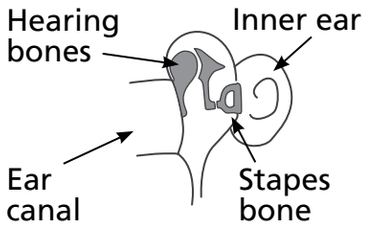
Please read and complete this form before admission

We suggest you use a pen ticking each section as you read it and jotting down any questions.

Consent - What does this mean?
Before any doctor, nurse or therapist examines or treats you they **must** have your **consent** or permission. Consent ranges from allowing a doctor to take your blood pressure (rolling up your sleeve and presenting your arm is implied consent) to signing a form saying you agree to the treatment or operation. It is important **before** giving permission that you understand what you are agreeing to. **If you do not understand – ask.** More detailed information is available on request.

STAPEDECTOMY SURGERY

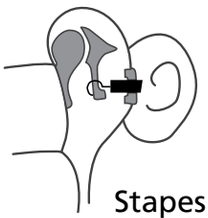
The stapes bone is the innermost of the three hearing bones. It is shaped like a stirrup. When sound comes into the ear it moves the three hearing bones. The stapes bone moves in and out and transmits the sound into the inner ear (the cochlea). The cochlea converts the sound energy into nerve impulses which travel up the hearing nerve.



You have a condition called **otosclerosis**. In this condition the stapes bone becomes stuck to the surrounding bone so it can no longer move freely. This means that the sound is not transmitted into the cochlea, which causes a hearing loss.

In a **stapedectomy** operation the arch of the stapes bone is removed. A hole is then created in the base of the stapes bone going through into the cochlea.

A plastic and wire strut (a stapes prosthesis) is then inserted. The plastic part is put through the hole in the stapes bone and the wire part is attached to the middle hearing bone. Fat is taken from your ear lobe and put around the plastic part to create a seal.



Now when sound moves the hearing bones the plastic strut moves in and out and the sound is transmitted into the cochlea allowing you to hear. **The majority of operations are very successful.**

Specialist Support
If you require this leaflet in another language, large print or another format, i.e. audiotape, please contact the Patient and Customer Services on Freephone 0800 917 6039

RISKS OF THE OPERATION

Hearing Loss
The act of creating a hole into the inner ear carries the risk of you losing all your hearing in that ear. This is known as a dead ear. This is a rare complication. The risk is about 2% ie. 2 in a hundred patients. If you have a dead ear you will not be able to use a hearing aid on that side. The operation has no effect on the hearing in the other ear.

I have read and understood the above paragraph please tick ☐
Questions _____

Dizziness or Balance Problem
The balance system is part of the inner ear. Opening into the inner ear can upset the balance system. It is not uncommon to experience some dizziness in the first day or two and this usually settles quickly. Very rarely you could be left with some long term imbalance. ***You should think about this very carefully if your job involves the need for good balance or working at heights.*** Most patients have no balance problems.

I have read and understood the above paragraph please tick ☐
Questions _____

Taste Disturbance
The small nerve that supplies taste to one side of the tongue runs underneath the ear drum. In order to get to the stapes bone the ear drum is lifted up and some bone from the area where the ear drum sits is removed. During this procedure the taste nerve is often exposed and moved to one side to improve the view. The nerve could be stretched, bruised or cut. This may cause a metallic taste on the side of the tongue. If this occurs it is usually temporary but it could be permanent. Most patients have no problems with their taste.

I have read and understood the above paragraph please tick ☐
Questions _____

Tinnitus
Tinnitus is a noise which is heard by the patient but is not actually present in the environment. It is an internally generated noise due to a problem somewhere in the hearing pathway. Tinnitus is common in patients who have otosclerosis. Stapedectomy surgery may have no effect on any tinnitus that you already have; alternatively it may start tinnitus, worsen tinnitus or improve or abolish tinnitus. Tinnitus can be temporary or permanent.

I have read and understood the above paragraph please tick ☐
Questions _____

Infection
Infection is uncommon. If the ear became infected there is a remote chance that it could damage the hearing or the balance system resulting in hearing loss or dizziness. Once the ear has completely healed there is minimal increased risk from an ear infection but, to be safe, if you develop an ear infection it would be advisable to get treatment from your GP with antibiotics **early** rather than wait and see how it goes. (Present GP guidelines suggest not giving antibiotics straight away in ear infections)

I have read and understood the above paragraph please tick ☐
Questions _____

Perilymph leak
A hole is made into the inner ear and the plastic replacement bone (the stapes prosthesis) is inserted into that hole. Some fat is packed around the hole to seal it. **It is very important that no strenuous activity is undertaken in the first couple of weeks after the surgery. You should have 2 weeks off work.** Straining or strenuous activity may cause a leak of inner ear fluid around the stapes prosthesis. This could cause hearing loss or dizziness. Very rarely it may be necessary to re-operate on the ear to look for a leak and seal it.

I have read and understood the above paragraph please tick ☐
Questions _____

Ear lobe
During the surgery a small cut may be made on the back of your ear lobe to take some fat which is used to seal around the prosthesis. The cut on the ear lobe is usually closed with absorbable stitches. Occasionally a cut may be made on the back of your hand to take some vein if a graft is required.

I have read and understood the above paragraph please tick ☐
Questions _____

Ear drum perforation
The operation is usually performed down the ear canal with no cuts around the ear. The ear drum is lifted up to gain access to the stapes bone. Rarely the ear drum may tear. A cut may then be made under the hair line behind the ear to take a graft to repair the ear drum tear. If the tear is large the stapedectomy part of the operation may need to be postponed.

I have read and understood the above paragraph please tick ☐
Questions _____

Unable to proceed
Sometimes the facial nerve may be hanging low over the stapes bone or the stapes bone may be completely buried in very thick bony overgrowth. In these instances it may not be possible to proceed with the operation.

I have read and understood the above paragraph please tick ☐
Questions _____

Facial Nerve Damage
The facial nerve lies just above the stapes bone. It is usually protected by a covering of bone. Occasionally this bony covering is missing. Damage to the facial nerve during stapedectomy is extremely rare (less than 1%). If damage did occur it could cause a weakness or paralysis of the face which could be temporary or permanent.

I have read and understood the above paragraph please tick ☐
Questions _____

Anaesthesia
The operation typically takes 1 hour and is performed under general anaesthesia. There is some risk associated with any anaesthetic, but this risk is very small. The anaesthetist will see you just before the operation to discuss any concerns you may have.

I have read and understood the above paragraph please tick ☐
Questions _____

AFTER THE OPERATION

Sneezing

During the first two weeks be very careful about sneezing. If you do sneeze keep the mouth open to 'allow the sneeze out'. If you close your mouth and try and hold the sneeze in you may push air up your Eustachian tube into your ear which may affect the outcome of the surgery.

I have read and understood the above paragraph please tick ☐
Questions _____

Restrictions

After you have had a stapedectomy and everything has healed up you can participate in any activities apart from those which may involve sudden pressure changes. I would advise that you never SCUBA dive. Pressurised aircraft are not a problem though I would suggest not flying for 3 months. Acrobatics in an unpressurised aeroplane would not be advised!

I have read and understood the above paragraph please tick ☐
Questions _____

Your ear will have some dressing in the ear canal. You should rest on your bed until the morning after the operation. You can then go home. You must **rest** at home for the next 2 weeks and avoid all strenuous activity. It is important to keep water out of the ear canal. We will see you in the Out Patients Clinic 2 weeks after the operation to remove the ear canal dressing.

IS THERE AN ALTERNATIVE TO SURGERY?

There are 3 alternatives to surgery:

1. Do nothing
2. Use a hearing aid
3. A bone anchored hearing aid. A screw is inserted into the skull and attached to a metal abutment which protrudes through the skin behind the ear. A hearing aid is then attached to the abutment. There is no risk to your hearing with this bone anchored hearing aid operation.

I have read and understand the contents of this information sheet. I have been given adequate time to consider it and have discussed the above material with those whom I feel may be of benefit in my understanding of the above.

Signature of Patient:
Date:

Author: **Written by Mr M B Pringle FRCS(ORL), Consultant ENT Surgeon**
Date: **Oct 2010** Review: **Oct 2012** Ref: **00** MPI ref: **10/3270 (ext 3246)**
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