This leaflet applies to the operations: combined approach tympanoplasty, modified radical mastoidectomy and cortical mastoidectomy. This surgery is performed when outpatient, medical treatment is not possible because of the disease extent.

Combined approach tympanoplasty (CAT), sometimes called closed cavity mastoid surgery and modified radical mastoidectomy, sometimes called open cavity mastoid surgery are normally performed for a condition called cholesteatoma. The aim of the operation is to give a safe, dry and hearing ear by excising the cholesteatoma sac and reconstructing the hearing mechanism.

Cholesteatoma is a sac of skin which erodes the bone surrounding the ear and the mastoid behind it. The sac usually arises from the upper part of the ear drum. Often the problem starts as a small dimple or pocket on the ear drum which gradually enlarges and eventually forms an erosive sac. Untreated, it can cause problems with discharge, deafness, dizziness and rarely, weakness of the face, meningitis or brain abscess.

The surgery is performed by making a cut behind the ear about 1 cm behind the crease as it attaches to the side of the head. This is closed with dissolving stitches which are under the skin.

**What are the risks?**

As with all surgery there are some associated risks. The risks are by and large the same as if the disease is left untreated.

**Deafness:**
The hearing may be worse after the surgery or very rarely it may go altogether. In the two (occasionally more than two) stage (closed cavity) operation the hearing is usually worse after the first operation and the chain of hearing bones are rebuilt at the second operation, if there is no sign of further disease.

**Tinnitus:**
Tinnitus may occur or become worse after surgery but may improve as time goes on.

**Taste disturbance:**
An altered or decreased sense of taste at the front of the tongue on the operated side can occur because one of the taste nerves runs through the middle ear. This normally becomes less noticeable over the course of a year.
**Dizziness:**
Dizziness occasionally occurs in the few days after surgery but rarely lasts more than a week.

**Infection:**
Cholesteatoma is, by its nature, infected. Occasionally the operation site can be infected post operatively and may increase the time taken for healing.

**Numbness:**
Numbness of the top of the ear. There is often some decreased sensation at the top of the ear which improves over time. This is because the nerve supply to the top of the ear is normally interrupted by the skin incision. Most people do not find this a problem.

**Facial weakness:**
The nerve supplying the face muscles runs through the middle ear, normally in a bony channel. If the disease has damaged the bony channel or the nerve runs in an abnormal position or the bony channel has not developed fully then the nerve may be damaged causing a degree of facial weakness. This is very rare and there is less than a 1% chance of damage.

**Leak of CSF:**
CSF is the fluid that surrounds the brain. Sometimes the disease erodes the bony partition between the top of the mastoid and the brain. This can leave the thick fibrous lining over the brain (the dura) exposed. Very rarely the dura is damaged whilst drilling and a leak of the CSF can occur. This would normally be repaired at the time of injury. The chance of a CSF leak is less than one percent. A small number of this 1% of patients who develop a CSF leak could develop meningitis which would need antibiotic treatment.

**After the surgery**
When you come around from surgery you will have a bandage on your head which will be removed the following morning. Good news...normally the pain is not normally too bad and paracetamol is usually a strong enough pain killer. You will normally go home the morning after surgery. There will be a yellow antiseptic wick in the ear canal to protect things whilst healing. There is often a squelching sound or popping in the ear when chewing or yawning, this is normal.
Post operative instructions

Dressings:
There will be cotton wool at the entrance to the ear canal; you need to change the wool when it gets moist with discharge. This may be twice a day immediately after surgery but maybe once a day a few days after surgery. If the yellow wick sticks to the wool then slowly pull it the wool off and push the wick back down your ear canal with your little finger. Trim any excess with a pair of scissors.

Sneezing:
Try to sneeze with your mouth open, , and don’t blow your nose for the first two weeks after surgery to prevent build up of pressure in the ear …sniff if you need to.

Washing:
You should keep the operation site dry until your surgeon tells you that you can get it wet…ask at your post op appointment. When washing hair an empty yoghurt carton can be put over the ear and it is easier if there is someone to help you. Swimming depends upon type of surgery and healing speed so ask your surgeon.

Work/School:
You should be off work for 7 – 10 days, depending upon how you feel. One of the main reasons is to try to prevent you picking up a cold when with other people. If you feel up to it, and have the sort of job that allows, you may well be able to work from home (or homework…sorry kids) within about 5 days.

Activity:
For the first three weeks gentle activity e.g. Walking, housework only.
After 3 weeks gentle exercise, bicycle at gym or walking on treadmill, golf.
After 4 weeks normal gym activity.
No physical contact sports for 6 weeks.

Flying:
You should not fly for a minimum of 6 weeks but it may need to be a little longer. Discuss with your surgeon.

Post-operative complications:
Contact the ward where you were admitted if you have any of the following:

A temperature of more than 38.5°C.
A severe headache not responding to over the counter medications.
Severe vertigo or vomiting.
Facial weakness.
Any other concerns.
What to do if you have any worries or concerns after the surgery

If it is within 48 hours or out of hours, phone the ward where you were admitted for surgery. During office hours phone our secretaries on 0118 9213160.

I have read this leaflet and had the chance to ask any questions to my surgeon.

Name:                                                      Signed:    Date:

Surgeon:                                              Signed    Date: