

## **Tympanoplasty- A brief note**

Tympanum means middle ear. Middle ear is a closed space covered from the outside by tympanic membrane (ear drum) and contains air, ossicles, muscles and nerves. Middle ear communicates to airway through the eustachian tube. It is continuous with mastoid air cells behind. In middle ear infection air in the middle ear is replaced by mucous or pus. Tympanic membrane becomes perforated and ossicles get damaged. This results in ear discharge and hearing loss.

Tympanoplasty takes care of these issues and tries to restore normal middle ear function. In Tympanoplasty infection in the middle ear is cleared, ossicular damage is rectified and ear drum perforation (hole) is covered with tissue grafts. In cases of profuse or long term ear discharge **mastoidectomy\*** is also done along with this.

Prior to surgery hearing is assessed by pure tone audiometry. General medical status is assessed by blood investigations and ECG. Details regarding diseases, medications, allergies should be shared with the doctor. There will be restrictions regarding in take of food and fluid before and after surgery. It should be complied with. Please read document named **instructions to patients posted for surgery** for more information.

Surgery is usually done under general anaesthesia. It is done using surgical microscope. It is done usually through an incision made behind the ear. It takes 1-2 hours depending on the extent and nature of disease. Main intention of surgery is to stop ear discharge and improve hearing

This is achieved in ninety percent of cases.

After surgery the patient is kept in post operative ward under observation for 3 hours and then shifted to room. In cases where further monitoring is required, the patient is shifted to ICU. Oral feeds can start 5 hours after surgery.

Patient may feel pain around the ear, ear block, giddiness and mild fever. Analgesic and antibiotic are given usually. Patient is kept in the hospital for one day.

It advised to stay at home for 1 week after surgery. There will be dressings around the ear. One should take care to avoid water entering the ear. While sneezing, the mouth should be kept open to reduce pressure in the ear. Body bath can be taken. Head bath is deferred for 10 days. If patient feels severe pain, swelling and discoloration around surgical site and ear discharge it should be brought to the notice of the doctor. First postoperative visit is on the 7th day. Further follow ups at regular intervals are required for a period of three months to evaluate healing. At the end of the third month, the ear is examined under microscope and audiometry is done.

Complications possible are damage to ossicles causing hearing loss, tinnitus and dizziness and persistent infection leading to ear discharge. But these are rare.

\*Please read document titled **Mastoidectomy - a brief note** as mastoidectomy is often combined with Tympanoplasty