

## Slide 1 Introduction

# Tympanoplasty

## Slide 2 Definitions & Frequency

A tympanoplasty is an operation which repairs the eardrum or ear bones in the middle ear. It is most commonly performed for repair of an eardrum perforation. It can be performed on children over the age of four. In the adult, it can be performed either under local or general anesthesia.

## Slide 3 Indications

A tympanoplasty is indicated for most eardrums which have a perforation. There are exceptions, such as not operating on the better hearing ear, if the patient is a poor surgical risk, and if extensive scarring is in the middle ear. Repeated ear infections usually indicate a need to close the perforation.

## Slide 4 Indications

In the child, a perforation can be caused by a myringotomy or ear tube, or rupture of the eardrum from an ear infection. Once the child has outgrown his recurrent ear infections in his opposite ear, the perforation can then be closed. If the child is getting recurrent ear infections from contamination in the perforated ear, then the operation may have to be performed sooner.

## Slide 5 Preoperative Instructions

It is very important not to take aspirin, aspirin products or other non-steroidal anti-inflammatory agents within 10 days of the surgery.

## Slide 6 Operation - Video

The operation may be done through the ear canal or from an incision behind the ear. A graft made of tendon is harvested from behind the ear. This is used to close the perforation. The perforation's margins are freshened and an ear canal skin flap is elevated. The following is a video of placement of the tendon behind the eardrum to close the perforation.

## Slide 7 Operation - Video

A sticky substance called Gelfoam is used to hold the graft in place. Gelfoam is placed both in the middle ear and ear canal. The following is a video of placement of Gelfoam in the middle ear to hold the graft in place.

## Slide 8 Immediate Post Operative Care

You will go home with a bandage around your head. You may take this off the next day. However, keep the thin cloth packing in the ear canal. If some of it comes out, gently

replace it. You will have some bleeding from the ear canal. This is normal. There are no stitches in the ear canal and cautery cannot be used, thus, oozing always occurs during the first 24 hours. You should apply triple antibiotic ointment to the incision behind the ear three times a day for one week.

#### Slide 9 Post Operative Care

No water in the ears for at least six weeks. Also, no flying in aircraft, scuba diving or parachuting. Do not do anything which will cause a pressure change in the middle ears. Do not play wind instruments and if you sneeze, sneeze with your mouth open.

#### Slide 10 How the Eardrum Will Look

Postoperatively the eardrum may appear scarred and thickened. It may also contain new blood vessels and mimic an infection, fooling many doctors into prescribing antibiotics.

#### Slide 11 Complications

The Chordia Tympani is a small nerve which runs behind the eardrum. It may need to be cut during surgery. It can also be injured during ear surgery on infected-scarred ears. If it is damaged, some patients may experience some loss of taste and numbness on the side of their tongue. If this does occur, this sensation usually subsides with time.

#### Slide 12 Other Complications

A patient's hearing loss may be improved with the operation, but scarring may also make it worse. About 10% of the surgeries fail and the perforation does not close. Sometimes the perforation closes but then reforms causing some failures to occur over one year after the operation. Rarely, the middle ear may scar extensively producing a permanent hearing loss. Also, some numbness of the external ear may occur from the operation and rarely the ear canal may scar and become narrow.

#### Slide 13 Results

It may take up to six weeks for the hearing to return or improve. The ear canal and middle ear are filled with an absorbable packing which the body will have to slowly absorb before hearing returns. If you had a significant hearing loss before the operation, most patients will have an improvement in their hearing.

#### Slide 14 Results

I have been performing this operation for over 20 years. In the last 10 years, I have performed this operation on 198 patients in Somerset, KY. Over 95% have had closure of their perforation.

## Slide 15 Contact Us

If you have any other questions regarding a tympanoplasty or repair of the eardrum you may talk to me after this presentation or call our office at any time.