

Gangguan Telinga

Ruptur Gendang Telinga

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Ruptured eardrum

□ Introduction

- A ruptured (perforated) eardrum is a tear or a hole in eardrum (tympanic membrane), the thin membrane that separates ear canal from middle ear.
- Damage to eardrum interrupts the hearing process and may impair your hearing.

- ❑ When eardrum is ruptured, bacteria can more easily reach your middle ear and cause infection.

- ❑ A variety of factors can cause a ruptured eardrum:
 - ❑ include a prior infection,
 - ❑ injury and
 - ❑ noise.

- ❑ Most ruptured eardrums heal within a few weeks without treatment. If the tear or hole in eardrum doesn't heal by itself, you may need treatment.

Causes

Causes of a ruptured eardrum may include:

- ❑ **Middle ear infection (otitis media).** A middle ear infection may cause your eardrum to rupture as the pressure of the fluid in your middle ear increases. Conversely, a ruptured eardrum can lead to an infection because your eardrum is no longer intact, allowing bacteria to enter your middle ear.
- ❑ **Airplane ear (barotrauma).** Pressure on your ear, such as during ascent or descent of a flight, can cause your eardrum to rupture.
- ❑ **Injury to your ear (acoustic trauma).** Damage to your eardrum can occur from a direct injury, such as if your ear is struck squarely with an open hand.

- ❑ **Foreign objects in your ear.** Small objects such as a cotton swab or bobby pin pushed too far into your ear canal can rupture your eardrum. Attempts to clean earwax (cerumen) from your ear can damage your eardrum and cause infection of your outer ear canal (swimmer's ear).
- ❑ **Loud, sudden noise.** A sudden, extremely loud noise, such as from an explosion or a firearm, can rupture your eardrum. Your loss of hearing may be great, and ringing in your ear (tinnitus) may be severe. Hearing usually returns partially, and the ringing in your ear often diminishes in a few days. But in some cases it may last indefinitely.

Signs and symptoms

A ruptured eardrum can be painful, particularly at first. Signs and symptoms may include:

- Sharp, sudden ear pain or discomfort
- Clear, pus-filled or bloody drainage from your ear
- Sudden decrease in ear pain followed by drainage from that ear
- Hearing loss
- Ringing in your ear (tinnitus)

Screening and diagnosis

- ❑ Otoscope : to look inside your ear.
- ❑ A sample of the fluid to be analyzed in the laboratory to determine if bacteria or fungi have caused infection

Complications

A ruptured eardrum usually isn't serious and often heals on its own without complications. But problems may occur, including:

- ❑ **Hearing loss.** Usually, hearing loss is temporary, lasting only until the tear or hole in your eardrum has healed. The larger the tear or hole in your eardrum, the greater your hearing loss tends to be. The location of the tear or hole also may affect the degree of hearing loss. If severe trauma, such as a skull fracture, damages the bones in your middle ear and causes injury to the structure of your inner ear, loss of hearing may be severe and permanent.
- ❑ **Recurrent middle ear infection (chronic otitis media).** Persistent or recurrent inflammation or infection of your middle ear caused by a large tear or hole in your eardrum can cause permanent

Prevention

Follow these tips to avoid a ruptured eardrum:

- ❑ **Get treatment for middle ear infections.** Be aware of the signs and symptoms of middle ear infection and seek treatment accordingly. Control the infection before it worsens enough to rupture your eardrum.
- ❑ **Protect your ears during flight.** Prevent your ears from popping and your eardrums from rupturing while flying. Don't fly if you have a cold or an active allergy that causes you to be congested. Wear pressure-equalizing earplugs or chew gum during ascent and descent to keep your ears clear.
- ❑ **Keep your ears free of foreign objects.** Never attempt to dig out excess or hardened earwax with items such as a cotton swab, paper clip or hairpin. These items can easily tear or puncture your eardrum. Teach children about the damage that can be done by putting foreign objects in their ears.
- ❑ **Guard against excessive noise.** Protect your ears from unnecessary damage by wearing protective earplugs or earmuffs in your workplace or during recreational activities if loud continuous noise is present. Keep the volume down when listening to music or television.

Treatment

Most ruptured eardrums heal without treatment within a few weeks, although some may take months. If the tear or hole in your eardrum doesn't heal by itself, treatment involves steps to close the perforation. Treatments may include:

- ❑ **Eardrum patch.** If the tear or hole in your eardrum is small, an otolaryngologist may seal it with a paper patch. This procedure is done in the doctor's office. Your doctor may touch the edges of your eardrum with a chemical to stimulate growth and then place a thin paper patch on your eardrum. Your ear may need several applications of a patch (up to three or four) before the perforation closes completely.
- ❑ **Surgery.** If your doctor determines that a paper patch won't provide prompt and adequate closure of the tear or hole in your eardrum, or if attempts with paper patching fail to heal the damage, you may need surgery. During a procedure called tympanoplasty, your surgeon places a tissue patch across the perforation, allowing it to heal. Tympanoplasty is often successful in closing the tear or hole permanently and restoring hearing. This procedure is done on an outpatient basis, meaning you can go home the same day.

Closing a perforation in your eardrum can:

- Prevent water from entering your ear while showering, bathing or swimming, each of which could lead to a middle ear infection
- Improve your hearing
- Diminish ringing in your ears (tinnitus)
- Prevent the development of a skin cyst in your middle ear (cholesteatoma), a cyst that can cause chronic middle ear infections and damage the structure of your ear

Nursing Intervention

Try these steps to stay comfortable while your eardrum heals:

- Use warmth.** Place a warm (not hot) heating pad over or against your ear to help reduce pain.
- Keep your ear dry while it's healing.** Use earplugs when showering or bathing.
- Refrain from cleaning your ears.** Give your eardrum time to heal completely.
- Use pain relievers.** Try aspirin or ibuprofen (Advil, Motrin, others) to help ease your ear pain. Ask your doctor which over-the-counter pain medication is best for you.

Foreign object in the ear: First aid

A foreign object in the ear can cause pain and hearing loss. Usually you know if an object is stuck in your ear, but small children may not be aware of it.

If an object becomes lodged in the ear, follow these steps:

- ❑ **Don't probe the ear with a tool.** Don't attempt to remove the foreign object by probing with a cotton swab, matchstick or any other tool. To do so is to risk pushing the object farther into the ear and damaging the fragile structures of the middle ear.
- ❑ **Remove the object if possible.** If the object is clearly visible, is pliable and can be grasped easily with tweezers, gently remove it.
- ❑ **Try using gravity.** Tilt the head to the affected side. Don't strike the person's head, but shake it gently in the direction of the ground to try to dislodge the object.

- ❑ **Try using oil for an insect.** If the foreign object is an insect, tilt the person's head so that the ear with the offending insect is upward. Try to float the insect out by pouring mineral oil, olive oil or baby oil into the ear. The oil should be warm but not hot. As you pour the oil, you can ease the entry of the oil by straightening the ear canal. Pull the ear lobe gently backward and upward for an adult, backward and downward for a child. The insect should suffocate and may float out in the oil bath.
- ❑ **Don't use oil to remove any object other than an insect.** Do not use this method if there is any suspicion of a perforation in the eardrum — pain, bleeding or discharge from the ear.
- ❑ If these methods fail or the person continues to experience pain in the ear, reduced hearing or a sensation of something lodged in the ear, seek medical assistance.

Thanks

