

Acoustic Neuroma

Vestibular schwannoma

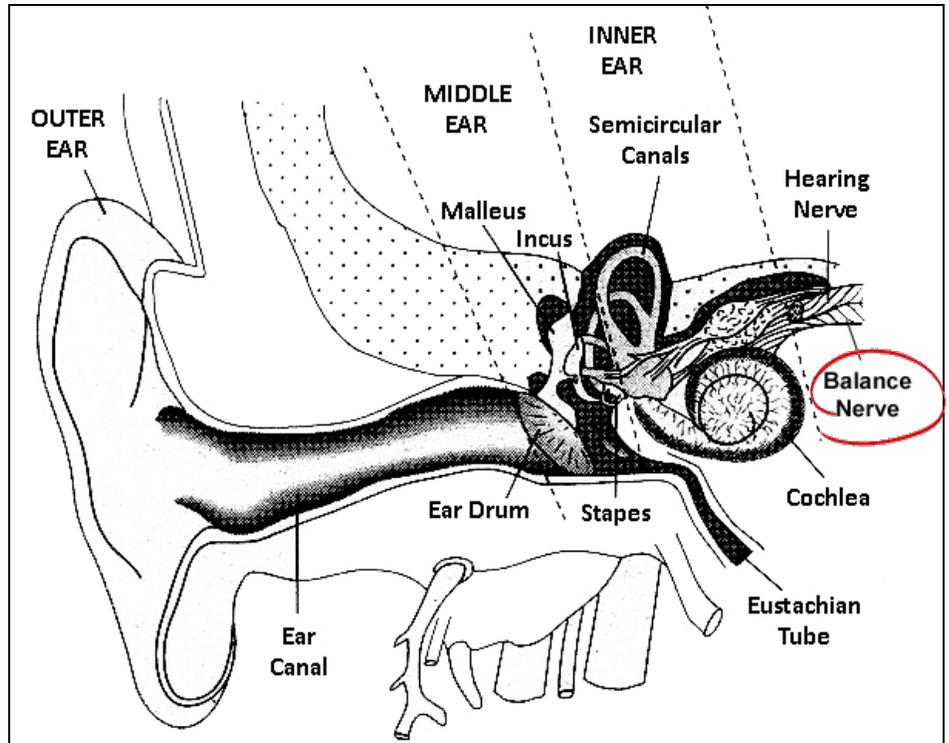
This handout explains what acoustic neuroma is. It also gives information about its causes, symptoms, and treatments.

What is an acoustic neuroma?

An *acoustic neuroma* is a rare, slow-growing, *benign* (non-cancerous) tumor. The scientific name is *vestibular schwannoma*.

An acoustic neuroma grows on the *vestibular* (balance) nerve. This nerve carries information from the inner ear to the brain and helps the body stay in balance. (See “Balance Nerve” in the drawing below.)

If an acoustic neuroma is not treated, it can grow into the brain stem and an area of the brain called the *cerebellum*. The cerebellum controls movement, balance, and muscle tone. If an acoustic neuroma grows into this area, it can cause hearing loss, *paralysis* (complete or partial loss of function), and even death.



An acoustic neuroma is a tumor that grows on the balance nerve. This nerve carries information from the inner ear to the brain.

What causes an acoustic neuroma?

The exact cause of an acoustic neuroma is not known. For some reason, the cells (called *Schwann cells*) that line the balance nerve start to multiply and form a tumor. Sometimes, other *cranial* nerves (nerves in the brain) are also involved.

What are the symptoms of acoustic neuromas?

Early symptoms of an acoustic neuroma may include:

- Hearing loss in the affected ear
- Ringing or buzzing sound in the ear, known as *tinnitus*
- Lack of balance or stability
- Feeling of fullness or pressure in the affected ear
- Numbness of the face on the affected side

Because an acoustic neuroma grows very slowly, early symptoms can be mistaken for a harmless disorder. This can delay diagnosis and treatment.

How are acoustic neuromas treated?

How the tumor is treated depends on:

- Your age and general health
- Size and position of the tumor
- Your hearing in the affected ear
- What recommended treatment option you choose

You do not need to rush into a decision about your treatment. Your options include:

- Observation
- Microsurgery
- Radiation therapy

Think carefully about all your options and talk with your health care providers and other experts about your concerns.

Monitoring

If your acoustic neuroma is very small and is not causing any symptoms, you may choose to have your provider carefully monitor it for a while. Your provider will use magnetic resonance imaging (MRI) to watch how the tumor grows. But even if it grows very slowly, treatment will most likely be needed at some point.

Microsurgery

Microsurgery removes all or most of the tumor. In this procedure, an opening will be made in your skull so that your surgeon can get to the tumor. Your surgeon will talk with you before your surgery about where this opening will be.

Rarely, these tumors grow back or tumor tissue that was not removed gets larger. If this occurs, radiation therapy may be used as a follow-up treatment if needed.

Radiation Therapy

Radiation of the tumor can stop it from growing more. It does not remove the tumor, but it may make it shrink.

Radiation usually works best when it is used on smaller tumors. If the tumor begins to grow again after radiation, it is harder to remove with microsurgery.

Radiation therapy can be safely used only 1 time on an acoustic neuroma.

Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns.

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After hours and on weekends and holidays, call 206-598-6190 and ask for the Otolaryngology resident on call to be paged.