

Otosclerosis and Stapedectomy

Otosclerosis is a disease where one of the bones of the middle ear behind the ear drum becomes diseased. The **stapes** or "stirrup" bone is the smallest bone in the human body and is the last of the 3 bones that conduct sound from the ear drum to the inner ear that allows us to hear. Normally, the vibrations of the ear drum cause these little bones ("ossicles") to vibrate, which then gets transmitted to the inner ear. In patients with otosclerosis, there is an overgrowth of hard bone around the stapes, causing it to become fixed and unable to vibrate. This can significantly impact the hearing in the affected ear.

Who is affected by otosclerosis?

Otosclerosis typically affects women twice as often as men and can affect one or both ears. Approximately 50% of patients have a family history of the disease. It usually begins to affect people in their late-20s to mid-40s.

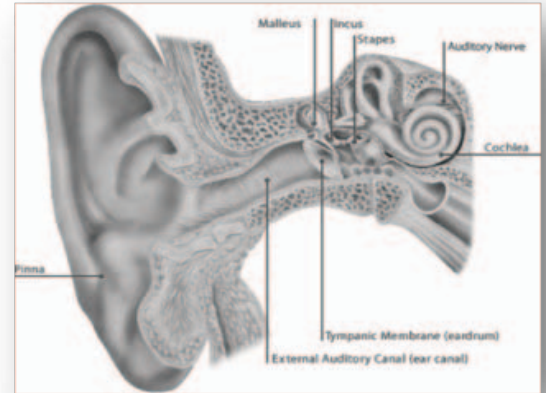
How do I know if I have otosclerosis?

The diagnosis is generally made in patients noting a significant loss of hearing in one or both ears. Your doctor will generally perform a comprehensive exam of your ears and will usually obtain a hearing test. Generally, the hearing test will demonstrate a pattern of hearing loss consistent with the diagnosis though often your doctor may want to obtain a CT scan of your middle and inner ear to confirm the diagnosis or rule out other potential causes of your hearing loss.

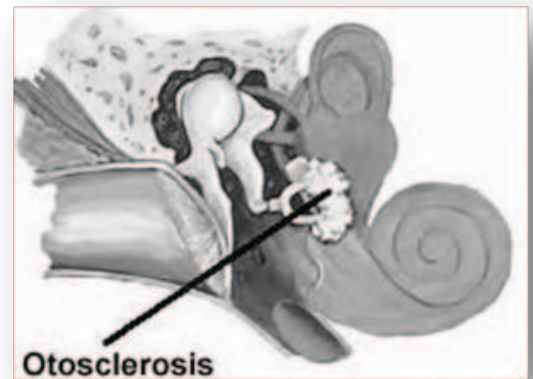
What is a stapedectomy?

Stapedectomy is the most common surgical treatment for otosclerosis which involves removing the diseased stapes bone and replacing it with a prosthesis that functions in its place. Typically an outpatient surgery, it usually can be performed through an incision made in the ear canal where the eardrum is carefully lifted up to obtain access to the middle ear.

A high power microscope is used for this type of delicate surgery and can be performed under general anesthesia or with just light sedation.



NORMAL EAR



EAR WITH OTOSCLEROSIS



STAPES REPLACED WITH PROSTHESIS

(continued on back)

What are the risks of surgery?

A stapedectomy is generally safe, however there are some possible risks that you should be aware of. These include a persistent hole in the eardrum, infection, vertigo. Serious complications include loss of or altered taste sensation on the side of the tongue that the surgery is performed on, as well as the risk of injury to the facial nerve, leading to facial paralysis. In some patients, the hearing may become significantly worse in the operated ear.

What are the alternatives to surgery?

For some patients that are not interested in surgery or also have a large component of nerve mediated hearing loss, a hearing aid may be your best option. Your physician as well as a Doctor of Audiology can counsel you with regards to best options based on the results of your hearing test. Some patients may be candidates for another type of procedure called a Baha, where a special implant is placed behind the ear that will then transmit sound directly to the inner ear, bypassing the ear drum and ossicles.

Online resources

Please visit the National Institutes of Health website at <http://www.nidcd.nih.gov/health/hearing/Pages/otosclerosis.aspx> for further information.

Clearwater

Office: 727-441-3588

1330 South Fort Harrison • Clearwater, FL 33756

Countryside

Office: 727-791-1368

3190 McMullen Booth Rd • Clearwater, FL 33761

Dunedin

Office: 727-450-0560

646 Virginia Street, 3rd Floor • Dunedin, FL 34698

Facial Aesthetics Center

Office: 727-446-FACE (3223)

1320 South Fort Harrison • Clearwater, FL 33756

Largo

Office: 727-397-8551

8787 Bryan Dairy Road, Suite 170 • Largo, FL 33777

Port Richey

Office: 727-819-0368

11031 US 19, Suite 104 • Port Richey, FL 34668

St. Petersburg

Office: 727-767-0933

6540 4th Street North, Suite C • St. Petersburg, FL 33702

Tampa

Office: 813-925-5000

8561 W. Linebaugh Avenue • Tampa, FL 33625

Trinity

Office: 727-247-1234

11320 State Road 54 • Trinity, FL 34655



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