PATIENT EDUCATION ON STAPEDECTOMY SURGERY FOR OTOSCLEROSIS

Your physician has recommended a middle ear surgery to correct a conductive hearing loss. This surgery is called a stapedectomy and involves removing the stapes bone (the smallest bone in the human body) and replacing it with a man-made prosthesis.

This surgery becomes necessary when a disease called otosclerosis causes a slowly progressive fixation of the stapes bone interfering with its ability to transmit sound vibrations to the nerve of hearing. The key components of the sound conducting mechanism of the middle ear are the three bones of hearing: the malleus, incus, and stapes. The sound vibrations that are picked up by the ear drum are transmitted through these bones through the oval window into the fluid of the cochlea in the inner ear where the nerve of hearing is stimulated sending a signal to the brain that we hear as sound. When the stapes bone is fixed by otosclerosis, this interrupts the transmission of the vibrations of sound into the cochlea of the inner ear and there is a hearing loss. When a prosthesis replaces the stapes, the sound vibrations are once again transmitted to the inner ear and the hearing improves.

The actual diagnosis of otosclerosis is made at the time of surgery because the ear exam and the CT scan may be normal. Occasionally there will be some other cause of hearing loss or some additional cause which will be addressed by the surgeon at the time, but may affect the outcome of the operation.

The surgery is done under general anesthesia in the hospital. Patients usually go home the same day. The entire procedure is done through the ear canal with the use of a microscope. The success rate of stapedectomy surgery is over 90 percent. After surgery, yearly follow-up exams including hearing testing will be necessary.

Complications are rare, but can include further permanent loss of hearing in the operated ear, facial weakness or paralysis, or an unhealed eardrum. Dizziness of varying degrees can occur, lasting from a few hours to several weeks. Your sense of taste on the operated side may be affected temporarily or permanently. The risks of general anesthesia (heart attack, stroke, death, etc) are also present, but fortunately rare.

Finally, just as you are a candidate for stapedectomy surgery because of your conductive hearing loss, you are also an ideal candidate for a hearing aid. You must decide which option is better for you.

If you have any further questions, please call the office at 630-981-0032.