Willamette ENT
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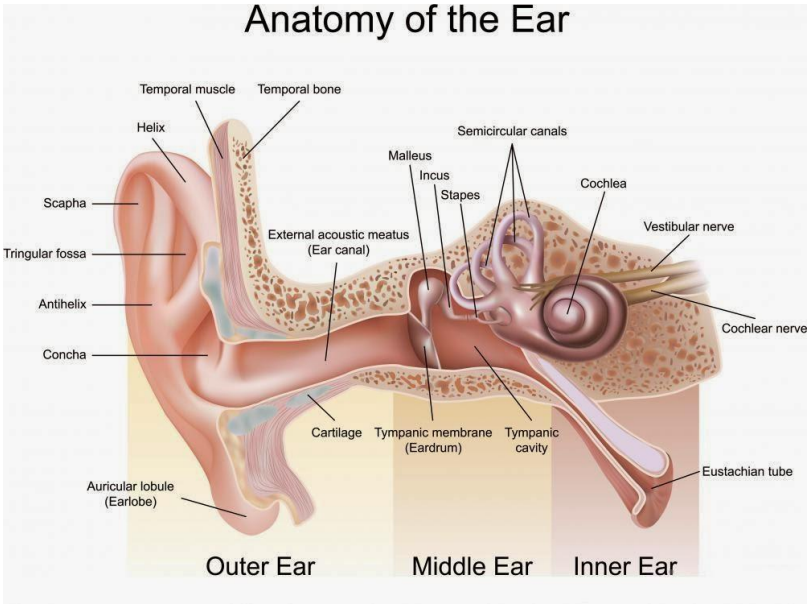
Information on

Stapedectomy

Transmission of sound: The sound waves are gathered by the outer ear and sent down the ear canal to the eardrum, causing the eardrum to vibrate which sets the ossicles in the middle ear into motion. The **ossicles** are the 3 smallest bones in the body. They are comprised of the malleus (hammer), incus (anvil), and the stapes (stirrup). The motion of the bones causes the fluid in the inner ear or cochlea to move. Movement of the fluid in the cochlea causes the hair cells to bend and changes the movement into electrical impulses. The electrical impulses are then transmitted to the auditory nerve, which are then sent to the brain where they are interpreted as sound.



Otosclerosis: One of the causes for hearing loss is otosclerosis, a condition where a buildup of bone around the stapes keeps the stapes from moving normally. The loss of mobility prevents the transmission of sound from the eardrum to the inner ear.

Stapedectomy: Is the surgical procedure of the middle ear where the non-functioning stapes is removed and replaced with a micro prosthesis. After the surgery, sound can again be transmitted from the eardrum to the inner ear, resulting in improved hearing.