

Wichita Ear Clinic Newsletter

Hearing Loss Treatment



According to an April 2021 World Health Organization report, 5% of the world's population (430 million people) has significant hearing loss in need of treatment. Hearing loss causes communication difficulties and, when severe, may lead to social isolation. The Wichita Ear Clinic team's primary goal is to improve the quality of life for those affected by hearing loss. We want our patients to have the opportunity to excel at school and work, and to enjoy their social lives. The types of hearing loss include sensorineural, conductive, mixed, and central.

Sensorineural hearing loss is most often treated with hearing aids. We recommend a hearing aid trial before any purchase. During the trial, patients can meet with the audiologist to make any programming adjustments and try different accessories. Patients should wear their hearing aids at home, work, and during social activities to make sure they help in their typical environments.



Fig. 2

Hearing aid models include behind-the-ear (BTE), in-the-ear (ITE), and completely-in-the-canal (CIC) (figure 1). The type of hearing aid recommended typically depends on the degree of hearing loss and patient anatomy. The **Lyric** is a completely hidden hearing aid placed in the canal that allows the user to participate in many activities that traditional hearing aids do not allow (figure 2).

Children (ages one and up) and adults that do not derive benefit from hearing aids are often cochlear implant candidates. The cochlear implant (figure 3) bypasses the non-functioning cochlea and directly stimulates the auditory nerve. The Wichita Ear Clinic surgeons perform cochlear implants in pediatric and adult patients. This is typically an outpatient procedure and programming and speech therapy are conveniently done on-site at our facility.



Fig. 3



Fig. 4

Some patients with single-sided deafness (SSD) and normal hearing in the contralateral ear may try a CROS (contralateral routing of signal) hearing aid. This hearing aid sends the sound from the deaf side to a receiver in the normal hearing ear. Bone-anchored hearing aids (BAHA) are also used to treat SSD and require a short outpatient surgery (figure 4). The CROS and BAHA improve speech discrimination in noisier environments. Recently, a subset of SSD patients has been FDA approved for cochlear implantation.

Conductive hearing loss occurs when there is something blocking the sound wave through the ear canal, drum, or ossicles.

The associated hearing loss may be remedied by simply removing wax or treating a middle ear effusion. Chronic infections and cholesteatomas may cause tympanic membrane perforations or ossicular discontinuity. These conductive losses are often treated with a surgical procedure, and any residual hearing loss may be amplified with a hearing aid.

A common, and often familial, hearing loss is caused by otosclerosis. This type of hearing loss is caused by fixation of the stapes bone and typically presents as a conductive or mixed hearing loss. Otosclerosis may be treated with hearing aids or a surgical procedure called a stapedectomy (figure 5). **Stapedectomy may be an attractive option for those patients that wish to avoid a hearing aid.**

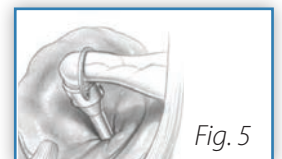


Fig. 5

The peripheral ear may hear normally, however, the nerve or auditory cortex may not with auditory neuropathy or central hearing loss. Traditional hearing tests are often normal and further brainstem and central processing testing may be required. Treatment strategies may include building compensatory skills, environmental modifications, assistive listening devices, hearing aids, or cochlear implants.

No matter where the hearing loss is located within the auditory system, help is available. Please contact a member of our team for assistance.

We Are Hear for You!

1. World Health Organization. April 2021

2. John M Lasak, Patrick Allen, Tim McVay, and Doug Lewis. *Hearing Loss: Diagnosis and Management. In Primary Care: Clinics. Elsevier 2014.*



WICHITA EAR CLINIC

*Hearing Aid and
Cochlear Implant Center*



WE ARE "HEAR" FOR YOU!

Wichita Ear Clinic provides state-of-the-art medical and surgical treatment for diseases of the ear and vestibular system. Our physicians, Thomas C. Kryzer, M.D., and John M. Lasak, M.D., are fellowship trained otologists, neurotologists, and cranial base surgeons. Lindsay Scott, ARNP, whose emphasis includes the medical treatment of otologic and vestibular disorders, has been a wonderful addition to our clinic and is also seeing new patients.

We treat all types of hearing loss, vertigo/balance disorders, Ménière's disease, chronic ear infections, myringotomy and tubes, cholesteatomas, facial nerve disorders, acoustic neuromas, and glomus tumors. In addition to surgery, our physicians also perform non-invasive stereotactic radiotherapy (Cyberknife).

Our audiologists provide state-of-the-art hearing aid services and can fit the latest technologies. Our physicians specialize in both pediatric and adult cochlear implantation. Implant mapping and programming is conveniently accomplished on-site. Our speech and language pathologist, Sarah Hall, provides speech evaluations and therapy for patients of all ages.

Our Providers:



John M. Lasak, M.D.



Thomas C. Kryzer, M.D.



Lindsay Scott, MSN, ARNP, BC



Sarah J. Hall, M.A., CCC-SLP

Speech/Language Pathology:

Audiologists:



Carmen Schulte, M.A., CCC-A



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