

## CHRONIC EAR INFECTION

The symptoms of chronic ear infection include ear drainage, odor or blood from the ear, hearing loss, and fullness or pain. There may be dizziness or vertigo, headache, and facial weakness, all of which indicate a possible serious complication. When a patient has a chronic ear infection, your physician will determine the likely cause of the problem and recommend treatment.

Most chronic ear infections develop in patients with a history of frequent childhood ear infections, ventilation tubes, and even prior ear surgery. There are 2 primary types of infections: 1) a perforated ear drum with infection in the middle ear and mastoid and 2) the development of a cyst-like infection in the ear called a cholesteatoma with chronic mastoiditis. In either case, your physician will take your history, proceed to clean the ear with gentle suctioning usually under microscopic control. Cultures may be taken, and based on this exam, and your hearing test results, treatment initiated. In most cases, the hearing test will show a conductive loss, that is a problem with the ear drum and transmitting system of the ear. Your physician may also schedule you for a CT scan of the ear to determine the extent of the damage.

The purpose of treatment is to clean the ear, and eliminate the chronic infection. This will often involve antibiotic therapy, ear drops, and even douching of the ear with antibacterial solutions. Depending on the progress and findings, a surgical procedure may be recommended.

Ear surgery consists of 3 major concepts: 1) to clear infection in the middle ear, mastoid, and around the hearing bones, 2) to graft the ear drum and possibly the mastoid to seal the ear from future infection, and 3) to reconstruct the hearing bones if they have been destroyed or involved with the infection. The procedure for this surgery is called a tympanoplasty or a tympanomastoidectomy which means removal or cleaning of the middle ear and mastoid bone. We prefer to do this procedure through an approach called a canal wall reconstruction which allows the more thorough removal of infection in the upper ear, using a microscope and using small telescopes to visualize the structures. After the cleaning, the canal wall is reconstructed using the patient's own tissue, a cartilage graft from the ear. This procedure usually heals rapidly and preserves near normal architecture. Alternatively, we may recommend a small cavity procedure to clear the disease, particularly in stubborn or difficult cases to resolve. This approach allows future cleanings, and is chosen when more structures have been damaged by infection.

Both procedures are performed as an outpatient and take about 1.5 hours to perform. The risks of these procedures, though rare, include infection, hearing loss, Bell's palsy, and dizziness. Your physician will review this information with you further at the time of your visit.