Indications for the BAHA System

The BAHA is an auditory osseointegrated implant. It is classified as a class two implanted device by the Federal Drug Administration (FDA) and is not a hearing aid. The surgical procedure is performed on an outpatient basis under local anesthesia and typically takes 30 minutes. Dr. David Foyt has performed several hundred BAHA implantations in children and adults in the Albany area.

Conductive hearing loss
Chronic Otitis Externa
Ear Canal Stenosis or Atresia
Chronic Ear Infections with Discharge

The BAHA is indicated when the conductive hearing component of the ear (ear canal, middle ear) is occluded or not functioning and a traditional hearing aid is not a viable option.

Single Sided Deafness

Sudden hearing loss in one ear is called Sudden Single Sided Deafness (SSD) and is fairly common. The BAHA functions by transmitting sound across the skull from the deaf side to the contralateral ear.
New treatments for sudden sensorineural hearing loss

Idiopathic Sudden Sensorineural Hearing Loss affects 20 out of 100,000 individuals each year. At the Ear Institute about a dozen patients are seen each week for this life altering disorder. Statistically less than 30 percent of these individuals will recover any hearing without prompt treatment. High dose oral steroid therapy has been the traditional treatment for sudden nerve deafness. Prednisone at a dose of 60 mg (1mg/Kg of body weight) is given as a single daily dose in the morning for 10 days. Often times magnetic resonance imaging is used to rule out acoustic neuroma.

Several years ago transtympanic steroid therapy became a common treatment, however, there was little scientific information to substantiate the therapy. Recently, several excellent placebo controlled double-blind studies have been published documenting the effectiveness of this therapy alongside traditional oral steroids. One new multi-center double-blind placebo controlled study of 51 patients showed that if hearing loss is identified within six weeks of onset, combined therapy of oral steroids and transtympanic steroids was superior to either treatment alone.


Take home message: Sudden hearing loss can be effectively treated with combined high dose oral steroid medication and transtympanic steroid therapy if instituted in a timely fashion.
Two new surgical procedures developed at the Ear Institute

Two new procedures for the implantation of hearing devices and cochlear implants were recently developed and published in major journals.

Minimal access approach for the vibrant soundbridge


Traditionally, cochlear and hearing implants required a large postauricular incision with a hair shave. A new procedure has been developed at the Ear Institute which allows implantable hearing devices to be fixed through a 4cm incision without a hair shave. This has allowed for greater cosmetic acceptance for implantable hearing devices. The technique has also been presented at several National and International conferences including Vienna and Buenos Aires.

Electrode bridge technique for Cochlear and Soundbridge Implantation


The electrode bridge technique was developed by Dr. Foyt to lock the cochlear implant electrode into position thus preventing movement of the implant. This has reduced the need for suture fixation and dramatically shortened the implant procedure. It has been performed on all major implant devices.
Cochlear Stem Cell Research

Capital Region Ear Institute has teamed up with researchers at the State University at Albany in an attempt to be the first center to successfully culture human cochlear stem cells. Institutional Review Board (Albany Medical Center) approval has been obtained to allow us to harvest cochlear cells from fresh cadavers. These cells will then be sorted and cultured for isolation. This would constitute a major advance in research for future hearing restoration with stem cell technology.