



COCHLEAR IMPLANT PROGRAM



About UHS

University Hospital Sharjah (UHS) is a tertiary care multispecialty hospital located in the University City area of Sharjah.

It brings together a multidisciplinary team of physicians, nurses and health-care professionals to address the most complex and challenging medical problems for the residence of Sharjah and Northern Emirates. UHS is also an academic institution and enjoys a robust educational affiliation with the Medical College at University of Sharjah.

With the unlimited support of His Highness Sheikh Dr. Sultan bin Mohammed Al Qassimi, University Hospital Sharjah will always endeavor to be the leading healthcare provider in the region.

Our Service Strength

325 beds spread across multiple specialties including 210 In-patient beds, 40 Specialty outpatient beds, 34 Emergency beds, 16 ICU beds, 20 Neonatal ICU, 12 Hemodialysis beds, Physiotherapy department, Cardiac Catheterization Laboratory.

Advanced breast cancer treatment and surgical solutions in collaboration with Gustave Roussy Centre.

Regional center of excellence for maternity care with dedicated theatre suite, fetal assessment unit, ultrasound department and neonatal intensive care unit.

First-of-its-kind children's diabetes clinic specialised in providing check-up, follow-up and treatment.

Level 3 NICU equipped to care for babies born at 23 weeks gestation and above as well as babies born with critical illnesses at all gestational ages.

24/7 Emergency Services.

24 hours pharmacy.

"DELIVERING EXCEPTIONAL HEALTHCARE"





Cochlear Implant Program at UHS

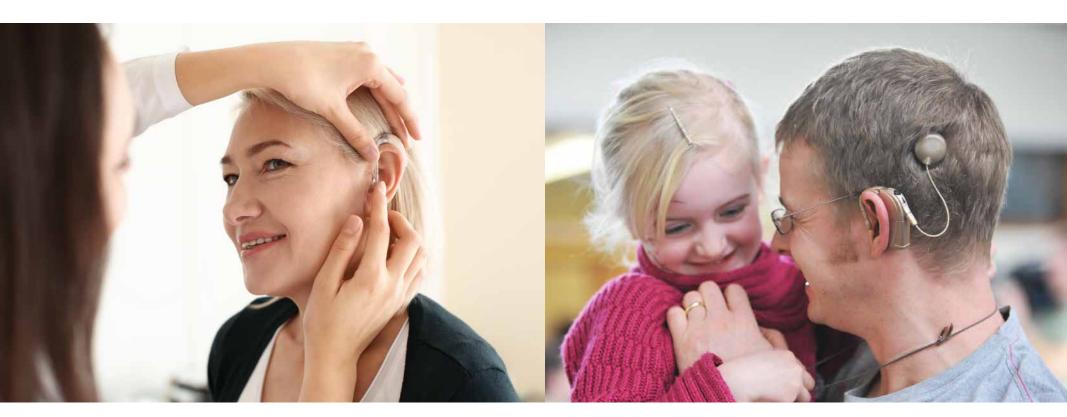
Cochlear implantation is a recognized and accepted medical procedure for the treatment of severe to profound sensorineural hearing loss (SNHL) in both children and adults. To cater the need for addressing the growing number of hearing loss (congenial or acquired) in children and adults in the region, U HS is proudly announcing its capacity to provide cochlear implant program for all the residents of Sharjah and other emirates in UAE. In line with the vision of H.H Sheikh Dr. Sultan Bin Mohammed Al Oasimi, the ruler of Sharjah and the supreme council member, to provide world-class treatment facility in the Sharjah emirate, U HS is equipped with the state of the art ENT and Audiology clinic to foster the need for the hearing loss population with highly skilled surgeons and Audiologists.

A cochlear implant is a surgically implanted electronic hearing device that provides individuals with the sensation of hearing by bypassing the damaged part of the ear and stimulating the hearing nerve directly. A cochlear implant is an option when the child or adult has very little remaining hearing, for example in severe or profound hearing impairment. A cochlear implant may be of more help than hearing aids in some cases, especially when the hearing impairment is so severe that even the most powerful hearing aid cannot make the sounds loud enough for the child to hear.

Cochlear implant surgery involves placing tiny electrodes into the cochlea in the inner ear. These electrodes convert sound into electrical signals that go to the hearing (auditory) nerve. The cochlear implant surgery causes a permanent change to the cochlea, and any hearing that the child had before the implant surgery may no longer be present. Once the decision is made to go ahead with a cochlear implant and the surgery is completed, the procedure cannot be reversed. Post Cochlear implant surgery, the audiologists would help the child or adults to hear through the Cochlear implant better.

Hearing Aids vs. Cochlear Implants

Hearing aids amplify sound and rely on the integrity of the hair cells of inner ear. Therefore, patients with a severe to profound hearing loss may obtain limited or no benefit from hearing aids for speech perception. A cochlear implant on the other hand bypass/replaces damaged hair cells and directly stimulates the auditory nerve. The electrodes in the internal component of the implant provide the "electrical spark" that is picked up by the nerve and taken to the brain for interpretation. Since the se electrodes lie along the length of the cochlea, it is possible to have access to the full range of sounds even where there are no hair cells present.



How a Cochlear Implant Works

Once the CI surgery is done, your audiologist would take over your hearing care through the cochlear implants.

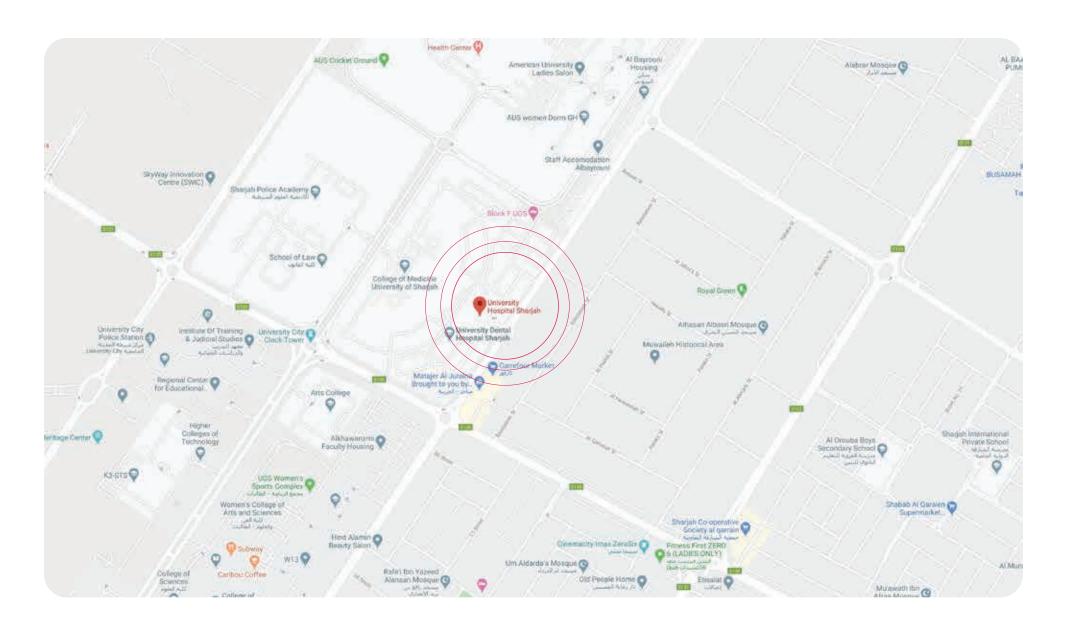
- Sound waves enter the system through the microphone (located in the processor).
- The sound processor converts the sound into a distinctive digital code that has been programmed or "mapped" by the audiologist to maximize cochlear implant sound and speech understanding.
- Once processed, the electrically coded signal is sent to the headpiece and transmitted through the skin via radio frequency (RF) waves to the implant.
- The implant receives the signal and delivers it to the array of electrodes positioned within the cochlea.
- The electrodes stimulate the hearing nerve fibres within the cochlea.
- The nerve sends the signal to the brain for interpretation.

Early Intervention

The ability to detect sound is critical to a child1 s ability to learn speech and language. The absence of such sound can have profound effects on speech and language development as well as the educational achievements of children. Given the potential impact on a child1 s life, it is critical that hearing impairment in children is detected early. Similarly, early referrals to the Cochlear Implant Team are crucial to ensure that maximum benefit is obtained from the cochlear implant.

Having the cochlear implant surgery is just the first step. After surgery, the child will hear many different sounds, but must learn what the sounds mean. Children with cochlear implants will require much training and language experience before learning to perceive and to produce meaningful speech sounds. Children with cochlear implants usually work together with speech-pathologists or auditory verbal therapists to help them learn to understand language and to talk.







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