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Bone Bridge FAQ's

What is Bone Bridge implantable hearing device?

The Bone Bridge is a fully implantable hearing device which is surgically buried under the skin (only the microphone is worn externally).It is used to improve hearing by directing sound energy to the Cochlear.

How are the components of Bone Bridge and how they work?

The Bone Bridge includes an external part, the audio processor and an implanted part, the Bone Conduction Implant (BCI). The audio processor is worn on the head and contains 2 microphones, a digital signal processor and a battery. The BCI consists of a receiver coil, a demodulator and a transducer. Information from the audio processor is sent to the BCI so that the transducer vibrates in a controlled manner specific to each patients hearing needs.

Who shall benefit from the Bone Bridge?

Children with congenital ear disorders and anybody with conductive hearing disorder or who have no hearing in one ear but good hearing in another ear shall benefit from Bone Bridge.

Bone Bridge is to be worn life long?

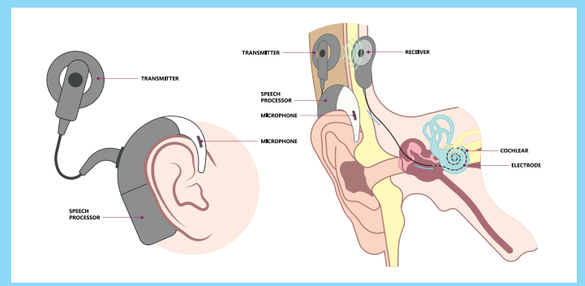
Yes. It is to be worn life long.

What are the conditions needed to have the Bone Bridge implanted?

The hearing nerve should be normal (at least in one ear). The skull bones should be thick enough to accommodate the Bone Bridge.

Tests required to determine whether Bone Bridge can be inserted

Audiological Tests
HRCT Scan of the Temporal Bones
MRI of the Head and Brain
Routine Blood Tests
Psychological Counseling



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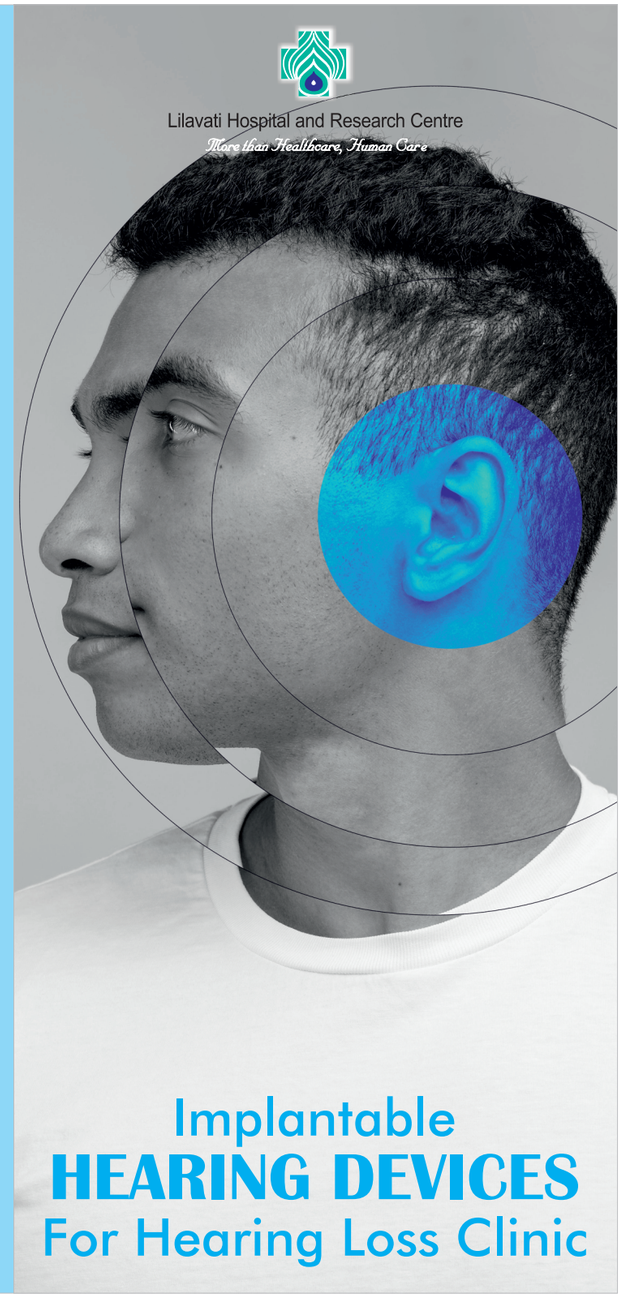


Cochlear Implant FAQ's

What is a Cochlear Implant?
A cochlear implant is a sophisticated artificial electronic hearing device that receives sounds from the environment and converts them into electrical impulses that stimulate the fibers of the acoustic nerve. They are implants and not transplants.

What are the components of a Cochlear Implant?
The cochlear implant system consists of interior and exterior components that work together to allow the user to perceive sound. The exterior components include a processor that receives sounds detected by a microphone, processes them into digital signals and then transmits them to the internal implanted parts that include an integrated processor that sends the signals through electrodes to the fibers of the acoustic nerve. The interior and exterior components are aligned over each other through the skin by magnets located on both sides.

Who shall Benefit from Cochlear Implants?
Children who are born deaf and Adults who have lost their hearing sense.

What is the age to receive a Cochlear Implant in a deaf child Age 2 or 3 years.

Tests required to determine whether a person requires & shall benefit from Cochlear Implant

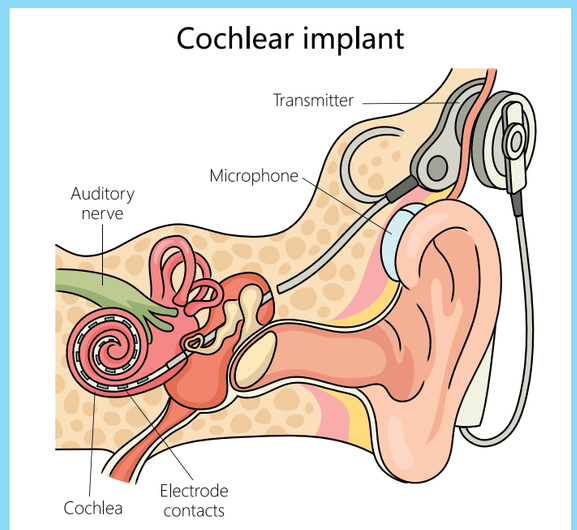
Pure Tone
BERA
OAE
MRI Brain
Impedance
Routine blood tests
HRCT Scan of Temporal Bone
Psychological Evaluation & Counseling

How does Cochlear Implant work?

1. external speech processor captures sound and converts it to digital signals
2. Processor sends digital signals to internal implant

3. internal implant turns signal into electrical energy. sending it to an array inside the cochlea

4.electrodes stimulate hearing nerve, bypassing damaged hair cells, and the brain perceives signals;



you hear sound

What is the difference between a Cochlear Implant and other alternative hearing aids?

People with hearing impairments tend to be divided into two groups: conductive hearing loss, which includes trauma to the outer and middle ear, and sensorineural hearing loss, which is caused by damage to the inner ear. The majority of conductive hearing impairment sufferers can be treated with surgery and regular hearing aids. Cochlear implant surgery is intended for sufferers of sensorineural impairment, with irreparable damage that cannot be treated with regular hearing aids.

What are the benefits of Cochlear Implants?
Cochlear implant surgery changes the lives of children born deaf, providing them with the opportunity to "learn" how to hear and participate actively in mainstream education.
The implant enables both adults and children to be aware of background noises, improves speech recognition and speech comprehension and in addition, speech execution and lip reading are enhanced.
The implant is not significantly larger than other hearing aids and can be concealed under the hair.

Should a deaf child have Cochlear Implants in both ears?
Yes. A deaf child must have Cochlear Implants in both ears. This can be done in the one surgery or can be done later on.

Do Cochlear Implants last a life time?
Yes. Cochlear Implants are expected to lasta life time. If the device fails it can be removed and another can be inserted.