Journal of Otology & Rhinology

Editorial

A SCITECHNOL JOURNAL

Cochlear Implants: A Hearing Aid

Ava Noah*

Department of Otolaryngology, Kobe University, Hyogo, Japan

***Corresponding author:** Ava Noah, Department of Otolaryngology, Kobe University, Hyogo, Japan, E-mail: Ava_Nh02@upd.jp

Received date: 01 March, 2021; **Accepted date:** 16 March, 2021; **Published Date:** 23 March, 2021

Introduction

A cochlear implant is an electronic device that restores hearing to some extent. It could be a viable choice for people who have serious hearing loss due to inner-ear damage and have exhausted all other options, including hearing aids. A cochlear implant is not the same as a hearing aid. Hearing aids enhance noises so that impaired ears can hear them. Cochlear implants work by bypassing damaged parts of the ear and stimulating the auditory nerve directly. The auditory nerve transmits signals produced by the implant to the brain, which recognizes them as sound. It takes time to learn or relearn how to hear with a cochlear implant because it is different from normal hearing.

Many people, on the other hand, can hear warning signs, understand other sounds in the world, and understand speech in person or over the phone thanks to it. Cochlear implants may be fitted to children and adults who are deaf or extremely hard of hearing. Around 736,900 registered devices had been implanted worldwide as of December 2019. About 118,100 implants have been implanted in adults and 65,000 in children in the United States. Cochlear implants were first approved by the FDA in the mid-1980s to treat hearing loss in adults. Cochlear implants have been FDA-approved for use in qualifying children starting at the age of 12 months since 2000. Using a cochlear implant when a child is deaf or extremely hard-of-hearing allows them to be exposed to sounds at a time when they are most likely to improve speech and language skills.

According to research, these children who undergo a cochlear implant and intensive therapy before the age of 18 months are better able to hear, comprehend sound and music, and talk than their peers who receive implants later in life. Cochlear implants may help certain people who have lost all or much of their hearing later in life. They learn to connect the implant's signals with sounds they recall, like speech, without the use of visual stimuli like lip-reading or sign language. The use of a cochlear implant necessitates a surgical operation as well as extensive rehabilitation to learn or relearn how to hear. With this unit, not everyone performs at the same stage. Discussions with medical experts, including an experienced cochlear-implant surgeon, may precede the decision to accept an implant. The procedure can be costly. A person's health insurance, for example, may or may not cover the cost. For a number of reasons, some people can opt not to have a cochlear implant. Surgical implantations are almost always secure, but complications do exist, just as they do with any other type of surgery. Learning to perceive the sounds produced by an implant is another factor to consider. This procedure necessitates patience and practice.

Scientists are investigating whether a shortened electrode array implanted into a portion of the cochlea, for example, will aid people whose hearing loss is restricted to higher frequencies while their lower frequency hearing is preserved. Researchers are also investigating the advantages of combining a cochlear implant in one ear with another cochlear implant or a hearing aid in the other.

Citation: *Noah A (2021) Cochlear Implants: A Hearing Aid. J Otolaryngol Rhinol 10:4*