Cochlear implants should be recommended for adults more often

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An international group of hearing specialists has released a new set of recommendations emphasizing that cochlear implants should be offered to adults who have moderate to severe or worse hearing loss much more often than is the current practice. The group hopes the recommendations help increase usage of such devices, potentially improving hearing and quality of life for millions worldwide.

The consensus statement, published Aug. 27 in *JAMA Otolaryngology*, was developed by a panel of 31 hearing experts representing more than a dozen countries. Craig A. Buchman, MD, the Lindburg Professor and head of the Department of Otolaryngology-Head & Neck Surgery at Washington University School of Medicine in St. Louis, led the panel.

Unlike hearing aids, which amplify sound for people who retain some ability to hear, cochlear implants help people hear by directly stimulating the auditory nerve.

The committee of hearing experts, which includes otolaryngologists and audiologists, said that the estimated 50 million people living with hearing loss severe enough to negatively affect quality of life could benefit from cochlear implants. The recommendations also are intended to raise awareness among primary care doctors and other health-care providers who potentially could diagnose hearing loss and refer patients to hearing specialists.

"Even though cochlear implants have been approved by the Food and Drug Administration since 1985, less than 10% of adults who could benefit from them actually receive one of these devices," Buchman said. "There may be a misconception that cochlear implants are only for young children born with profound hearing loss. But these devices can be extremely effective for adults who have lost hearing later in life. Adults who have difficulty talking on the phone, for example, are probably candidates for a cochlear implant."

Buchman also said adults and their doctors may turn to hearing aids because they assume such devices will solve the problem and help avoid what is perceived by many to be a major surgery.

"Cochlear implants can be implanted in an outpatient procedure that typically takes about an hour," Buchman said. "It's a safe procedure and highly effective. In addition, hearing aids only work for those who need some amplification. But as hearing diminishes, people start to lose clarity as well. Making unclear speech louder doesn't help with comprehension—people start to sound like the teacher who mumbles in the Charlie Brown cartoon. At that degree of hearing loss, a cochlear implant is the recommended intervention because it can restore clarity."

The consensus paper reports 20 statements that the panel of experts voted to include in the document. The recommendations, which were arrived upon following a review of scientific literature on cochlear implants, cover seven
categories for adults with moderate to severe or worse hearing loss in both ears. They focus on:

- Awareness of cochlear implants.
- Best practice guidelines for diagnosing hearing loss.
- Best practice guidelines for cochlear implant surgery.
- Clinical effectiveness of cochlear implants.
- Factors linked to outcomes after cochlear implant surgery.
- Relationship between hearing loss, depression, social isolation and dementia.
- Cost implications for cochlear implants.

"Research indicates that hearing loss is the single largest modifiable risk factor for dementia, and cochlear implants can perhaps lessen that risk," he said. "We hope these recommendations will eventually lead to formal clinical practice guidelines. Such guidelines could increase access to cochlear implants worldwide, address disparities in care, and lead to improved hearing and quality of life for adults living with debilitating hearing loss."

Buchman said another possible barrier to wider adoption is that hearing loss is surprisingly difficult to diagnose. Primary care offices do not always have the specialized equipment used to test hearing, and patients are adept at finding ways to cope with diminishing ability to hear.

"During a one-on-one checkup, it's actually quite easy for doctors to miss even severe hearing loss," Buchman said. "Hearing loss can happen gradually, and people may not notice the degree to which they are relying on lip reading and the context of what they can hear to compensate for what they're missing. But to compensate for lost hearing successfully, they need to have face-to-face interactions."

"If you are a doctor having a wellness visit with a patient, a simple way to screen for hearing loss is to go to the sink and wash your hands," he said. "With the water running and your back to the patient, try asking a few questions. If the patient doesn't respond in that situation, it's appropriate to start a conversation about hearing loss with him or her and discuss whether formal hearing tests are appropriate."

Hearing loss has been associated with social isolation, depression and dementia. Though research is ongoing to understand the role of hearing loss in these problems, Buchman and his colleagues said strong evidence suggests that improving hearing can have a significant impact on quality of life.

Provided by Washington University School of Medicine

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