LISTENING WITH TWO EARS IS BETTER THAN ONE

Wearing hearing instruments in both ears (binaural amplification) offers many advantages over wearing one hearing instrument. Regardless of the degree of hearing loss, most individuals with a hearing loss find that their hearing can be significantly improved with binaural amplification.

Very few people wear one lens for vision problems that affect both eyes. Similarly, if there is a hearing loss in both ears, it often makes sense to provide amplification for both ears. When patients wear one hearing aid when two are actually required, following conversations and determining from which direction sounds are coming can be difficult. Wearing two hearing instruments restores a more normal sense of balance because sound is amplified in both ears. Research has shown that with two ears, we can hear whispers that are 3 dB lower than what we could hear with only one ear (Dermody P & Byrne D, 1975).

Regardless of the degree of hearing loss, most individuals with a hearing loss find that their hearing can be significantly improved with binaural amplification.

Binaural fittings offer many advantages to patients including improved sound sensitivity, better localization of sound, and better hearing in noise.

IMPROVED SOUND SENSITIVITY

Wearing two hearing aids allows patients to hear more sounds more naturally since the auditory system is designed to pick up sound signals from both ears. Many people find that listening with two ears is easier and more relaxing than listening with one, because they do not have to strain to hear with their “good” ear. The loudness of a sound is also greater if it is heard with two ears than if it is only heard with one ear. Therefore, patients using two hearing aids can often set their hearing aids’ volume lower than those who are fit with only one hearing instrument. Turning down the volume has an added benefit of reducing the potential for uncomfortable feedback.

IMPROVED ABILITY TO LOCATE SOUND

Your patients’ ability to determine the direction sounds are coming from depends on their ability to process and compare signals arriving at both ears. If their ears are not functioning equally with respect to their ability to hear signals, localization suffers. Bilateral hearing aids enable better localization by providing audibility to sounds that would not have otherwise been audible in the unaided ear.

To determine the direction of low-frequency sounds, our brain compares the time difference of sound reaching our ears. To determine the direction of high-frequency sounds, our brain compares the intensity difference of sounds reaching our ears. Each ear then sends messages to both sides of the brain. This information, could be potentially life-saving information to know, such as when listening for traffic when crossing the street or when driving.

IMPROVED LISTENING IN NOISE

Listening in background noise is difficult for anyone and even more difficult for people with hearing loss. Take away one ear and listening in noise is almost impossible since the brain needs input from both ears to separate sounds effectively.

With two hearing aids, patients' capacity to suppress unwanted background noise is improved, making hearing conversations easier. Furthermore, with two ears, speech does not have to be as loud compared to the noise for a person to pick it up and understand it. Therefore, patients wearing two hearing aids can set their volume controls lower than with a single hearing aid, allowing for more comfortable sound levels and less irritating background noise.

AUDITORY DEPRIVATION

When patients do not wear a hearing aid in an ear, with their hearing loss their brains begin to lose some of their ability to process information. The lack of sound stimulation results in auditory deprivation. In addition, research has shown that, when patients with binaural aidable hearing loss are only fitted with one hearing aid, the unaided ear may progressively lose its ability to recognize speech (Silman, S, Gelfand, S, & Silverman, C, 1984). The earlier they consider wearing two hearing aids, the better their chances of minimizing this risk.

The brain needs input from both ears to localize sounds effectively.

Most patients can benefit from wearing two hearing instruments. The vast majority of people fitted binaurally do not go back to wearing only one hearing aid since their hearing is significantly improved when wearing two hearing aids.

References

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About Unitron Hearing

Unitron Hearing is committed to bettering the lives of people with hearing loss by developing high-quality hearing solutions that incorporate special features to solve the everyday problems and concerns they have with hearing loss and hearing aids. This commitment also benefits you, the hearing physician, with practical fitting options, support when you need it and the ability to offer solutions that address what matters most to your patients.

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