Evidence on the Bilateral Fitting of Hearing Aids to Adults

Binaural Hearing and Bilateral Aiding

The benefits of binaural hearing are well evidenced and reported. They include improved speech understanding in noise, sound localisation and sound quality.

The aim of bilateral aiding is to maintain the benefits of binaural hearing through amplification and advanced signal processing.

There is much evidence that demonstrates that binaural benefits are maintained when people are aided bilaterally. This includes evidence of:

- improved speech understanding in noise \(^1,2,3,4\)
- improved localisation\(^1,2\)

Further studies have demonstrated the patient reported benefits of bilateral aiding compared to unilateral aiding \(^1,5\). This includes improved hearing of speech when in more demanding listening situations or when attention may be divided or switching and reduced listening effort. \(^6\)

Auditory Deprivation

There is additional evidence that not aiding a second ear when there is a known hearing loss can lead to unilateral auditory deprivation \(^7,8\) which can result in negative physiological and perceptual changes \(^9\). The negative impact of auditory deprivation can occur within a year of unilateral aiding \(^10\) and can be irreversible. \(^11\)

Tinnitus

There is evidence to support that bilateral hearing aids are more effective at reducing the difficulties associated with tinnitus than unilateral aiding. \(^5\)

Patient Preference

There is good evidence that many people prefer two hearing aids as opposed to one. Reasons given include feeling more balanced and improvements in sound quality, clarity, localisation, comfort and reduced listening effort. \(^1,2,13,14,15,16\)
National Policy and Guidelines

The NHS England Guidance document: Commissioning Services for People with Hearing Loss 17, recognises the benefits of bilateral hearing aids. It states that people generally benefit from being offered two hearing aids (one for each ear) unless there are reasons that this would be inappropriate.

Similarly, the Scottish and Welsh Quality Standards for Adult Hearing Rehabilitation Services18, 19 state that, where clinically appropriate and as identified within an individual management plan, bilateral aids are offered and patients are supported to make an informed choice.

The National Institute for Health and Care Excellence (NICE) are in the process of developing a Guideline for Hearing Loss. The Scope for this Guideline includes, within its key issues and questions, the clinical and cost effectiveness of one hearing aid compared with two.20 This Guideline is due to be published in May 2018. A Cochrane Review is also underway, which will also be considered by the NICE Guideline Committee ‘Unilateral versus bilateral hearing aids for bilateral hearing impairment in adults’ (Browning et al).

References


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