



• An individual's health is the most important factor in determining their quality of life. Getting their hearing checked early cannot only reduce the risk of ear diseases but also the risk of dementia, depression, or anxiety – particularly in middle-aged and older adults with cognitive impairment. Moreover, the ability to hear well may improve both private and professional social interactions in middle-aged and older adults. Therefore, ENT specialists should encourage their patients aged 50 years and older to regularly have their hearing checked. In the following, we are specifically referring to adults aged 50 years and older (hereinafter referred to as "adults 50+").

Age group

50+

Frequency of hearing screening

every 5 years

How can my patients get their hearing screened?

- · online for free
- questionnaire
- hearing test

What can I do as a clinician?

- encourage hearing screening for all adults
- create awareness about hearing loss and adult hearing screening



- Cochlear implantation improves speech perception scores and, thus, communication skills in adults aged 50+ with severe-to-profound sensorineural hearing loss.³
- Cochlear implantation is safe and well tolerated in adults aged 50+.4
- Whenever possible, bilateral implantation should be considered.
 Bilateral implantation is recommended to ensure the best outcome for adults aged 50+.5
- Bimodal stimulation may result in better speech recognition in adults aged 50+.6
- Adults aged 50+ with residual hearing in the low frequencies may benefit from electric-acoustic stimulation.⁷
- Adults aged 50+ with single-sided deafness may also show improved speech perception after cochlear implantation.⁸
- Cochlear implantation is associated with an improvement in cognitive performance in adults aged 50+.9
- Several studies provide clear evidence on reduced social isolation and loneliness AND increased autonomy and quality of life in adults aged 50+ after cochlear implantation.
- Reduced levels of depression, anxiety, and stress can be observed in adults aged 50+ after cochlear implantation.¹¹
- Adults aged 50+ may enjoy improved music appreciation after cochlear implantation, particularly if tonotopic fitting is applied.^{12,13}





Selection criteria for adults aged 50+

- Postlingual severe-to-profound bilateral hearing loss¹⁴
- Postlingual moderate-to-profound hearing loss if hearing aids provide no or only limited benefit14
- · Perilingual hearing loss depending on the individual's communication abili-
- Prelingual hearing loss under special circumstances^{14,15}



Assessment process

A multidisciplinary cochlear implant team should conduct a comprehensive assessment of the candidate's hearing abilities, including medical, audiological, and communicative tests.14



Preoperative information and counselling

- · The candidate receives thorough information and counselling about the entire cochlear implant treatment according to a checklist.14
- Candidates should have a clear understanding of the benefits and limitations of implantation. Expectations must be managed to ensure a positive outcome throughout the entire process.14
- Candidates' relatives and friends should be encouraged to become involved in pre- and post-implant management.14



Surgery in-patient care

- The surgeon is responsible for the overall medical care of the patient throughout the patient's stay. After surgery, the surgeon should continue to monitor the patient's progress during the postoperative period.¹⁴
- An intra- and/or postoperative radiological examination to check the position of the device and the electrode array should be considered.14



Postoperative care

- · The audio processor should be fitted and programmed by experienced clinical personnel once the wound has healed satisfactorily.¹⁴
- · The audio processor should be fitted and programmed only by experienced and specifically trained clinical personnel.¹⁴
- · During initial programming, clinical personnel need to check external components, explain programming procedures, and the use of the audio processor.14
- Postoperative rehabilitation tailored to the recipient's individual needs should begin right after initial fitting. This helps facilitate acclimatization to the new sensation of sound and outline the rehabilitation programme.¹⁴
- Appropriate standardized audiological, speech perception, and quality-of-life measures should be performed after initial programming, at least twice in the first year following surgery, and at regular intervals thereafter to allow progress to be monitored.14



Follow-up

- · The patient must have easy access to a cochlear implant centre (or a local service partner) for programming and rehabilitation.¹⁴
- Adequate spare parts and replacements of external equipment must be available. Audio processor batteries should be available to implant recipients either from the cochlear implant programme or from a local audiology department.14



Device failure

- · If an internal device failure is suspected, the user should be offered an appointment and the implant manufacturer contacted promptly.14
- · The device failure must be reported to the relevant national health authorities.14



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