
DEAFNESS IS LIKE A DESERTED ISLAND

Ms Róża, born in 1937, has been suffering from hearing loss for many years. She wore hearing aids for a long time. Over time they stopped helping her. At the age of 70, she decided to receive her first cochlea implant, four years later - the second one. She worked very hard to be able to enjoy the world of sounds. Her case shows that the modern technologies used in medicine are effective for patients at every age.

Single words missed in a hasty day-to-day communication, mispronounced patients' names, ignoring a nurse calling from the other end of the hospital's corridor. The first symptoms of hearing loss appeared in Ms Róża 40 years ago. For her - a general practitioner - they were a serious issue. As a doctor, before proceeding to treatment, she had to auscultate the patient, interview him/her. - I wondered what to do to prevent a dead silence from falling in my surgery during an interview with the patient - jokes Ms Róża - recalling the beginning of her hearing problems. She didn't hesitate to use hearing aids. Actually, it was one hearing aid, because it was assumed in Poland at the time that using one in one ear was enough. She had a different opinion. Her family, who lived abroad, sent her another device. First, she wore analogue aids, quite primitive for today's standards, which didn't help her much. But there was no alternative. Ms Róża's condition gradually deteriorated and she needed stronger devices. Unfortunately, stronger doesn't mean more effective.

How did patients react to a doctor with hearing aids? - Sometimes, they were bewildered - answers Ms Róża. - Especially as the aids would sometimes fall off and fly all over the admission room - she says laughing. But a moment later she becomes serious. - I somehow managed to survive until retirement, that is up to the age of 65 - she recalls. - But then it got even worse - she says. - I had more and more problems in my day-to-day life. I didn't hear a doorbell, I didn't understand much from TV shows, and I couldn't listen to my favourite radio station. Even conversations with my neighbours started to exhaust me - she recalls. - And I was surprised by more and more situations. For example, men wearing balaclavas suddenly appeared in my house. I forgot to set off the burglar alarm entering my home. So the security guards arrived because the alarm was wailing and I didn't hear it. On top of that, it became difficult for me to settle simple matters at an office, post office. Even visits to the family or friends were disturbing. How can you handle door phones, which are installed in almost every block of flats, if you can't hear? - she asks. Ms Róża couldn't

accept the fact that the world was gradually shutting down for her and she had a worse and worse contact with it. She decided to find out whether she was really doomed to a deaf "late adulthood" - as she called old age. She sought help at the Institute of the Physiology and Pathology of Hearing. People like her are increasing in number.

- Indeed, there are more and more old age patients with hearing problems - says Artur Lorens, PhD, head of the Department of Implants and Hearing Perception of the Institute. There are many causes of that. One of them is demographic changes. Societies, including the Polish one, age, and there are more and more patients aged 65+. Among them are those with hearing problems.

Age-related deterioration of hearing is a natural phenomenon that results from ageing processes occurring in the hearing system. Added to that are environmental threats - especially ubiquitous noise, which is a risk factor in hearing damage. We also see a change in the social policy towards the elderly. There is an increasing focus worldwide on ensuring them the best possible comfort of life. Wealthy EU countries spend a lot of money on that. And the better the overall health condition of the elderly, the greater their communication needs and the more willing they are to seek help if they suffer from hearing loss - explains Lorens. - We are gradually seeing this phenomenon in Poland as well - she adds.

Operate, do not wait!

Specialists from the Institute decided that the most effective method of treatment for Ms Róża's hearing loss would be cochlea implantation. Wasn't the patient's age - over 70 years old - a counter-indication? - The procedure of qualifying for implantation does not specify the upper age limit - says Lorens. - During the diagnosis, apart from audiological criteria we also took into account other health factors which might affect the safety of treatment. The elderly are more likely than the young to have additional conditions apart from hearing loss. It is necessary to consider counter-indications for the surgery, including general anaesthesia. The decision about implantation should be taken jointly by the specialist and the patient and take into account such non-audiological criteria as e.g. the patient's psychological state, his/her needs and motivation for receiving treatment, as well as family and professional situation.

Ms Róża decided to undergo operation quickly and without hesitation. - It wasn't hard for me - she says. - I am a doctor, I recommended operations to people many times. I was always of the opinion that if an operation is necessary, there is no point in delaying it.

- Such attitude is not common among our patients - says Joanna Putkiewicz, a psychologist from the Department of Implants and Hearing Perception. - Another reason why older people fear implantation is because they are more afraid of new technologies than the young. The necessity of learning new things without relying on their life experience causes concern for them. Often, they are simply unwilling to learn and put effort. Our task as specialists working with patients at the stage of qualification for treatment and later rehabilitation is to meet the specific needs of this age group. Such people require a different type of support and education, because they have a different pace of work, may have additional problems connected with age, e.g. deterioration of cognitive processes (capabilities related to perception, attention and memory) or worse overall performance. - That's why this group should be treated in a special way - adds Lorens. - At the Institute, we are introducing a programme tailored to such people. In recent years, this group has seen a clear growth in number, although most of our patients are still children and youth.

What do the elderly expect from an implant?

- They often focus on the so-called "normal hearing" - which they remember from when they didn't have hearing problems - answers Joanna Putkiewicz. - It is effortless hearing which allows a person to communicate in any conditions and freely use the media. They also expect immediate effects. Our task is to make these expectations more realistic, because not everyone will be able to achieve this even after a long rehabilitation.

Did the implant meet Ms Róża's expectations? - It fulfilled my hope that the things would be better - she answers. - But it wasn't exactly what I wanted. At first, I had problems understanding speech. Fragments of words got blurred, I had to guess a lot.

The rehabilitation Ms Róża underwent in the Institute brought effects, but she was aware that without her own engagement she would not make the most of it. She decided to practice intensively on her own. She found a perfect way to do so. - After receiving the first implant, I invited my neighbour for breakfast every day and she practised with me all these consonants, one-syllable words, sentences - she says. - We met for quite a long time, but maybe it's because I made really good breakfasts for her - she says laughing.

- Support given to a patient by his/her nearest and dearest is a very important aspect of rehabilitation - Joanna Putkiewicz stresses. - Sadly, older people are often lonely. They don't have anybody who could practise with them, motivate them to learn, or simply talk to them from time to time. Conversations on a daily basis are also a good

hearing practise. The case of Ms Róża shows that it's worth looking around the immediate environment and try and seek help.

Ms Róża did not stop at breakfasts with her neighbour. She came up with the idea that she would practise by listening to recordings from medical conferences connected with her specialisation - general medicine. She assumed that being a doctor, knowledge of the subject and vocabulary would make the task easier for her. - And she was right - says Joanna Putkiewicz. - It's important that the language material used during rehabilitation is appropriate for the education and interests of a given person so that she/he can rely on her/his knowledge and life experience.

English, French and cacophonous music

It took Ms Róża one year to achieve a significant improvement in understanding speech in one implant. She still wore a hearing aid in the other ear. This gave her a comfort of binaural hearing. Unfortunately, over time the second ear stopped functioning too. - This situation scarred me - she recalls. I realised that I'm completely dependent on an implant - a device that can break down. And if this happens I will be unable to live on my own, to communicate with others. At the age of 74, Ms Róża received an implant in the second ear. It benefited her immediately. And only then did her real adventure with hearing begin. Thanks to two implants, sound became stereophonic, words took on colour, speech - melody, and conversations, even in difficult acoustic conditions, did not require so much effort any more. Ms Róża decided to refresh foreign languages she once knew and liked. Once again, audiobooks with medical conference recordings proved helpful. - However, over time I started to choose mainly geriatric ones - she says laughing. - But learning to understand foreign languages was horrible at the beginning - she recalls. - I thought I heard something but when the recording ended I could not repeat anything. The life-saver for me was video books, because I could listen and watch at the same time - she says. She practised systematically, several hours a day. First French, then English. With the former, she had much more problems. Now she understands them quite well. But she still practices regularly, because - as she says - when she does not listen to them for a long time, it becomes worse. She is also refreshing her Russian, listening to the pope's sermons on the radio. Recently, she even bought herself a tablet. While in bed in the morning she listens to lectures she finds on the Internet.

The effects of Ms Róża's work are admirable. Unfortunately, not all patients have as good results. - Among older people with an implant, we observe a huge spread of results in terms of the level of speech understanding - says Lorens. - However, this applies to all age groups. So, just because somebody is 80 does not mean that it will take him/her a long time to achieve full proficiency in communication. A lot of older

people reach this stage after 3 to 6 months. That's very fast. So, age is not a predictor. What can matter, however, is how long a person suffered from hearing loss. As a rule, the longer somebody did not hear well, the more time it will take him/her to achieve good results. A patient's individual conditions also play a role. We should also bear in mind that older people's difficulties with understanding speech don't have to be necessarily due to hearing problems. They may be caused for example by neurodegenerative changes in the brain, slower pace of information processing (that's why they occur even in seniors with quite a good hearing). That's why - as was already mentioned - appropriately prepared rehabilitation and education addressed at the family and the nearest and dearest is so important. - It should take into account - adds Lorens - e.g. the knowledge of communication strategies applied by the elderly, including their reliance on the context and life experience to understand utterances. By relying on it, they can often guess quite accurately what the message was even though they didn't catch part of it. Older people are often more capable in that respect. It's worth taking advantage of that during a hearing practise at home. When starting a conversation, it's good to first signal its topic, speak more slowly, give examples, taking into account not only hearing capabilities of the older person, but also his/her knowledge and interests.

And what strategy did Ms Róża adopt? - I said to myself that I had to adapt to the world because the world would not adapt to me - she says. - That's why I do everything to hear as best as I can, I don't run from irritating sounds, I don't turn off the speech processor when kids are shouting nearby. I travel, go to the cinema and theatre, and learn new technologies.

Still there is something in the world of sounds that Ms Róża couldn't learn to be comfortable with. It's music. Sometimes it's simply a kind of noise for her. She recognises the pieces she used to like from the rhythm, and all the time she gets an impression that the sounds she hears are not clear. - Maybe that's because I've always loved a word, the music of a word - says Ms Róża. Still, thanks to the implants she made a certain discovery. - I started to like an unpredictable cacophonous music that is based on disharmony of sounds. And the music I used to listen to, I don't enjoy it any more - she says.

Where there's a will there's a way

Ms Róża knows many people from her generation who have hearing problems but do nothing with them. How would she encourage them to seek help? - I would tell them that they don't realise how their social functioning is gradually becoming limited. How much they miss out by cutting themselves off from contacts with other people. For example, I have an acquaintance, a man my age. His wife thinks that he doesn't need a hearing aid because it doesn't help him. And if it doesn't help, it means that

he can still hear pretty well. That's her reasoning. But I see his expressionless face and helpless look during social situations and I know that he hardly understands what we are talking about.

- We think that much more older people with hearing disorders could improve the quality of their life if they sought help in the Institute - says Lorens. - But either they aren't aware of that or they aren't referred to the relevant specialists by general practitioners. In some cases, it's not an older person who seeks help but his/her nearest and dearest. They are fed up with repeating lines from grandma's favourite TV series to her. - This requires work with the whole family - adds Joanna Putkiewicz. - Not only to motivate the elderly person for increased activity, but to change the family's attitude to the senior citizen.

I asked Ms Róża whether it was worth putting so much effort and work to hear better. - It was worth it, the only thing you need is a will - she answers. - I don't see any biological, age-related counter-indications.

Where does she take her strength and determination to go after her goals from? - When I was a child my mother instilled in me what proved to be my life philosophy until this day - she recalls. - When we read the story of Robinson Crusoe she would tell me that nobody could avoid rocks in life. And you have to fight so as not to crash into them. I think I'm winning. In a sense, deafness is like a deserted island...