

## Your hearing - your life

#### **Summary**

Hearing loss can happen to anyone, at any age, however ageing is the single biggest cause of Hearing Loss. There are Seven common signs of Hearing Loss.

- 1. Speech sounds muffled
- 2. Difficulty hearing when there is background noise
- 3. Pardon? Asking people to repeat themselves
- 4. Turning up the volume
- 5. Difficulty using the phone
- 6. Feeling isolated or down
- 7. Tinnitus

In this article Audiologist Catherene McKinney will explore the reasons for these signs, and what can be done to manage Hearing Loss and tinnitus. Catherene's aim is to bring you fully up to date with how best to manage your Hearing and get the most out of life.

Catherene worked for the NHS until 2007 where her experience included clinical and research work with world tinnitus expert, Johanthan Hazell. She headed the Audiology Department at Guy's & St. Thomas' NHS Foundation Trust before starting her private practice at The Portland Hospital in London.

#### Introduction

Approximately 9 million people in the UK have a hearing loss. This is approximately 19% of the total population or 1 in every 7 persons. Hearing loss increases sharply with age. About one third of the population aged between 60-70 years and three quarters of the population aged over seventy years have a hearing loss.

This means that if you do have a hearing loss you are in very good company. For years hearing aids were "big beige bananas", as nobody really thought that older people needed something that not only worked really well, but looked really good. Well, thanks to your generation all of that has changed! With hearing aids now more hearable technology than hearing aids, you can use them in either very simple or very complex ways – and they also look good. Much better than your grandchildren's Bluetooth speakers!

Hearing loss can be temporary or permanent. You may also have other symptoms such as earache, unusual noises in your head or ears (tinnitus), increased sensitivity to sound, or a spinning sensation (vertigo).

Sometimes hearing loss is only in one ear, but more often it occurs in both ears. Signs of a hearing problem in one ear include finding that your hearing is better on the phone in one ear than the other, worse when sound comes from one side and finding it hard to tell where sound is coming from.

There are many causes of hearing loss, the most common being ageing. Excessive earwax is also a common cause, and your Audiologist can check for this and remove it if necessary.

Factors that increase your risk of hearing loss include loud noise, a family history of hearing loss, exposure to loud occupational or recreational noise, some medications and some illnesses such as diabetes.

Ototoxic drugs include antibiotics such as gentamicin, loop diuretics such as furosemide and platinum-based chemotherapy agents such as cisplatin. A number of nonsteroidal anti-inflammatory drugs (NSAIDS) have also been shown to be ototoxic.

Hearing loss can make it more difficult to talk to health care providers and emergency workers. It also increases social isolation – all significant health risks. Hearing loss is a huge factor in Dementia – numerous studies have shown that people are less likely to develop Dementia if they have an aided hearing loss, and in fact hearing loss can be one of the biggest factors in determining whether or not people will develop Dementia. There are a few studies showing similar effects with vision.

In other words, the better you hear and see, the more information the brain has to keep it active and engaged.

#### Seven signs of hearing loss

#### Muffled Speech - Speech and other sounds are quiet and unclear

The most common response I have when I come to testing hearing is "I don't really have much of a problem, but other people really don't speak very clearly". And of course that is true – regional accents, foreign accents, people who speak faster than normal, people who speak more quietly than normal or who don't face you when they speak to you – all of these are more difficult to hear. However even a mild hearing loss in the higher frequencies really enhances these difficulties. If you are experiencing them, it may be a very early sign that there is a hearing loss developing.

The second most common response is "well I don't really have a problem, but my husband / wife / friends / children / grandchildren think that I do". If this applies to you then you probably have a hearing loss that has developed very slowly over time.

Hearing loss is sometimes sudden, but more often it happens gradually and you may not notice it at first. Often it is friends or family who first notice the problem. This is because we are tremendously adaptable as human beings – the brain copes by making adjustments for as long as it can. However often there comes a "tipping point" when either the person with the hearing loss or those around them just can't cope any more. This is the point at which they think "I really need to do something about this", however, as I will show you later, they would do so much better if they had "done something about it" earlier.

# Poor Hearing in Noise - Difficulty understanding words, especially in background noise or in a crowd of people

The majority of the clarity of speech, and ability to distinguish words, comes from the higher-frequency elements of speech – for example, to tell the difference between /CAT/ and /SAT/ and /FAT/ and /THAT/ and /PAT/ or /SAY/ and /PAY/ you need good high frequency rather than low frequency hearing. Guess what goes first as we age – that's right – high frequency hearing! Even a slight hearing loss causes these problems.

So, put a high frequency hearing loss in an environment with lots of background noise or echo, and the lower pitched noise obscures the higher-pitched speech clarity. This is exactly what happens in social gatherings, restaurants, or presentations when the speaker is some distance from you.

People with normal hearing have these problems too of course, however they have a much greater reserve of sound than people with even a slight hearing loss.

#### Pardon? - Asking people to repeat themselves

If you often find yourself asking others to speak more slowly, clearly and loudly you may have a hearing loss. People with a hearing loss often feel that those around them are speaking less clearly than they should, or are mumbling. Unfamiliar accents can be particularly difficult to hear clearly.

You may also be having difficulty keeping up with conversations.

#### A bit about how we hear with our eyes:

About 40% of what we "hear" comes directly from the words that we hear. Another 20% comes from the context of the conversation and picking up one or two key words which allows you to fill in the gaps where you didn't hear all the words. The rest comes from a combination of lip reading, expression, gesture and body language.

So, if you are not hearing so well you must rely on a lot of other things to understand people. For example, if you are not hearing 25% of speech sounds, you have to rely more on the other factors. This works up to a point, however nine times out of ten you will need to ask for some words to be repeated. If you miss a vital key word you may well get completely the wrong end of the conversational stick.

Of course, your hearing will be only as good as what you can see in situations where you really cannot hear the words. So, people with their faces turned away, in poor lighting, or who are some distance away will be particularly difficult to hear.

All of this can be very stressful and tiring. Having to concentrate so hard on all these cues makes hearing far more effortful. The increase in effort and tiredness in turn makes it even more difficult to follow conversations.

#### Turning up the volume - The radio, TV or music volume is higher for you than for others

One of my first questions is "do you turn the TV up", and a sure sign of a hearing loss is yes. The style of TV drama has changed enormously over the years and has become far more "reality" orientated. This means that there will often be music or other background sounds behind the dialogue, main characters will not speak to the camera, lighting will be poor and all those vital visual cues will be lost.

Even news presenters have changed their vocal and presentation style. This makes them far more "on trend" but doesn't do a hearing loss any favours.

Of course a hearing loss also means that the quality of speech and music is not as good as before as you hear less of it. The problem is made worse by poor sound from your TV – flat screens tend to have small speakers that face outwards rather than forwards, and one of the easiest solutions may be to get a good quality sound bar to connect to your TV.

If you are considering hearing instruments, make sure that you try out TV accessories – usually a small box that plugs directly into your TV and streams sound wirelessly to your hearing instruments. You can therefore adjust the TV to suit you exactly, and maximise the sound that you hear.

Another solution is putting the subtitles on, however these vary in quality. There is nothing worse than only getting the punchline of a joke some time after it has been spoken.

#### The Phone - Difficulty hearing on the phone

When we listen over the phone we are totally reliant on what we hear – you cannot use your eyes! Interestingly people hear relatively well over the phone with a mild hearing loss but start having difficulties beyond that point. This may take the form of having to turn the phone volume (if you have one) up, or not being able to hear unfamiliar voices. Often people get key words mixed up, especially numbers, with potentially disastrous consequences.

People with mobile phones often resort to using them on speaker, with the volume cranked right up. The problem is that everyone else can hear your conversation too.

Mobile phone companies, particularly Apple, have been very proactive in recognising this difficulty, and that hearing instruments can be at the heart of the solution. You can link many hearing instruments to a mobile phone, and this means that the conversation comes directly to your hearing instruments. You can then adjust the volume to suit you, and noone else will hear what is being said. People love this solution – it really has been groundbreaking.

Of course the other advantage of linking your phone to your hearing instruments is that you can control them with an App if you would like (although they will work without this).

Some hearing instruments also allow you to connect your hearing instruments to your landline phone.

#### Feeling isolated and down - Avoiding social settings has a big emotional impact

If you don't hear so well, then listening will require more concentration, be more effortful and more tiring. Some people cope by withdrawing from settings where they know that it will be difficult for them to hear. However over time this can leave you feeling left out and isolated. This is not good for healthy brain ageing.

Be aware that not hearing well can also make you feel anxious and depressed. If you are feeling this way it will be even more difficult to concentrate on what is being said.

You may be surprised at how much having a hearing loss can affect your emotions – you may feel helpless or depressed, and get angry or frustrated. Getting help with your hearing loss as soon as possible, and having a good social support system will help you to avoid many of the emotional problems that can be associated with having a hearing loss.

Being hard of hearing doesn't mean that you are not thinking as clearly – in fact there is increasing evidence that the earlier you get help with your hearing the better your brain function is preserved.

Life is too short to miss hearing friends and loved ones, enjoy music and get back to a normal life. You will need a lot of social time in order to learn to hear with your new hearing instruments.

#### Tinnitus - Noises in the head or ears that others can't hear

Tinnitus remains one of the most common auditory symptoms. Depending on the definition of tinnitus and the criteria applied, prevalence rates in adult populations vary from 8.2 to 20.0% rising to 17.9 to 30.3% in those over 50 years of age. It is more common with hearing loss, but it is not true to say that the worse your hearing is, the worse the tinnitus will be.

In most cases it is not associated with anything serious, however you should always mention it to your Audiologist so that they can refer you for a medical opinion if necessary.

Sometimes tinnitus only lasts for a short period, often after loud noise, and sometimes it goes on for longer. Most people do not find it to be a problem, however a significant minority of people find it troubling.

There are a number of ways of managing tinnitus very effectively, whether or not you have a hearing loss. A hearing instrument is often one of the most effective management strategies. Other ways include low level sound, and many hearing instruments can be programmed to provide bespoke sound options.

By far the most important way of managing tinnitus is avoiding the "vicious circle" of hearing it, focussing negative thoughts on it, and becoming anxious and worried about it. The tinnitus sound that you hear is really in most cases a tiny nerve signal that the hearing pathways have incorrectly labelled as a threat. This causes other parts of the brain that govern our emotional and physical reactions to threats to become fixated on the tiny nerve signal, and give it a "fast track" pathway to the brain.

Reversing this can take time, however most people do it on their own unless something unexpected happens.

#### What happens if you have a hearing loss?

So, now we've gone through the 7 signs that you may have a hearing loss, what is the result of that hearing loss? Apart from the obvious "not hearing" you will probably notice:

- 1. Informal communication in the home with your loved ones is harder
- 2. You may want the TV at a different volume to your loved ones
- 3. You may struggle more on the telephone
- 4. Background noise or echo is your enemy
- 5. Increased tiredness
- 6. Listening is more effortful
- 7. If you have Tinnitus, it is louder if you are struggling to hear
- 8. Withdrawing from environments that are difficult to hear in
- 9. Frustration with yourself or others
- 10. Your brain starts to become less good at discriminating speech
- 11. Your brain may start to age more rapidly

I cannot stress enough that this is not a good place to be and is one that can be helped enormously by the right information and hearing instruments where necessary. It is certainly not a sensible option to deny yourself help if you can benefit from it.

#### What to do next

If you suspect that you have a hearing loss it is important to have a hearing test carried out. In most cases there is no medical or surgical management for hearing loss, but in some cases a hearing loss can be an indication of another medical condition. You will be referred to a medical practitioner if your Audiologist has any concerns.

However, if your hearing loss is sudden, particularly if it is only in one ear you should see your GP as soon as possible.

Your Audiologist will examine your ears, and then carry out a hearing test which will show exactly what sounds you are hearing and whether or not you have a hearing loss.

Based on the test results, your Audiologist will discuss various management options, which may include hearing aids and other hearing devices, listening exercises, local support groups, or perhaps just keeping an eye on things. No matter what you decide, you should always be offered reviews of your hearing every year or every two years.

Don't delay – older people wait an average of 7 years to accept that they have a hearing problem and get it treated, and 71% of people with hearing aids wished that they had got them sooner. That is 7 years of missing out on hearing friends, family, birdsong and other sounds that you love.

Waiting 7 years is too long - there is good evidence that the better we hear the more we protect our brains from the effects of ageing. So getting help sooner rather than later will help you in the long run.

Use your Audiologist for advice – they will not only test your hearing, they will give all the information you need to make the best decision about how to manage your hearing loss.

#### **Further information**

You may also find our other Resources helpful.



## The Mills & McKinney Practice

### Department of Audiology & Audiological Medicine

The Portland Hospital, 234 Great Portland Street London W1W 5QT

Tel: 020 7390 8057

Email: info@mmhearing.com

www.mmhearing.com