

Question 1

I occasionally get caught out in the rain without an umbrella. Do I need to take my hearing aids out or will they cope with a shower of rain? Is there any way to waterproof hearing aids completely? I used to enjoy sailing but I can't wear my hearing aids on the water and, as my hearing deteriorates, I feel more and more isolated without them.

- Use of your hearing aid around water can restrict air flow to the batteries causing it to stop working therefore there is no solution to allow you to wear hearing aids in water over an extended period of time
- However, depending on your hearing aid some are water resistant to a depth of 1 meter for 15 to 60 minutes and designed to be used in all daily life situations. Therefore, you do not have to worry about getting the hearing aids exposed to a rain shower, or sweat. However, Phonak hearing aids are not intended to be used in water activities that include chlorinated water, soap, salt water, or other liquids with a chemical content.

Question 2

Patient liaison at the RSCH - Some years ago, I attended an Audiology Patients Liaison Group on a regular basis. It was both interesting and useful but I have not been invited for a long time. Has the group ceased to function or have I simply been dropped off the list?

- The group sadly ceased to function in 2014. We are actively trying to get it up and running again with the aim to have a meeting in the Spring or Summer of this year. We will be advertising it nearer the time, so watch this space; **all welcome** we are very keen to have as much patient involvement in our service development as possible.

Question 3

Recently there appears to be a significant variation in ear moulds and tubing size. Could Anna please explain what factors drive the choice?

- Earmoulds can be made in many different materials, some soft some hard, some hypoallergenic and some coloured. Earmoulds can also be made in many different styles some filling the ear, some half filling the ear and some just in the ear canal.

The earmould material and style is dependent on many factors:

- Degree of hearing loss – the worse your hearing the softer the mould needs to be to help reduce the risk of the hearing aid whistling

- What you are used to – if you have worn a certain mould type for some time, unless your hearing has changed, it is off worth sticking with what you are used to as your ear gets used to it.
- Allergies – if you find your earmoulds make your ears itch or you get lots of infections you may have a specific type of mould such as a silicone mould or UV coated one with lots of air venting in it.

Tubing comes in a range of sizes, and does differ slightly between earmould companies. The range available is as follows:

- Standard tubing
- Thick tubing
- Stay dry tubing
- Libby horn tubing

The tubing size is dependent on many factors:

- Manufacturer – each one has a slightly different tube bore size
- If you have a soft earmould you may need a thick tube over time as the tubing bore tends to get bigger
- If you tend to get lots of moisture in your tubing you may benefit from stay dry tubing which reduces the build-up of moisture in your tubes
- Your hearing loss may warrant a different type of tubing such as libby horn tubing, although as hearing aid technology improves this is becoming less important

Question 4

I obtain my batteries from Frimley Park where my present hearing aids, Oticon Spirit Zest P, were last updated and fitted in 2009. I change the tubing as required myself. They are worn from getting up to going to bed. My question is how often should they and my hearing be checked to determine they are giving me the optimum aid, and do I require a doctor's referral to have this done?

Hearing

- We recommend you have your hearing re-checked every three years. We don't get in touch with you. The quickest way to obtain a new hearing test is to come and see us on a repair clinic (walk in at Guildford, booked at Frimley Park).
- If you have started to notice your hearing is worsening, and it hasn't been three years since your last hearing test, you should attend a repair appointment and the audiologist and you can discuss whether you require a new hearing aid.

Hearing Aids

- We recommend the settings of the hearing aids are checked every three years, after your hearing test.

- In terms of maintenance the computer part of the hearing aids are very robust and can last many years with good care, therefore unless the hearing aid appears to have no sound it is unlikely this part of the hearing aid will need replacing.
- The tubing needs changing every 3-6 months.
- Hooks on the hearing aid may need changing every 1-2 years (occasionally more often if they have a filter and your ears create lots of moisture).
- Filters on the hearing aid may need changing every 6-12 months (occasionally more often if you work in a dusty or dirty environment).
- We can give out spare hooks and filters, along with tubing, at request.

Question 5

What help can the drop-in clinic at RSCH give apart from changing tubes and supplying batteries? Can they tell me which programmes are installed on my aids? Can this be done over the phone or through the post?

- The drop in clinic can help you with:
 - any aspect of hearing aid repair –tubes, hooks, filters, replacement hearing aid parts
 - hearing aid insertion and learning what different controls do
 - turning the volume of the aid up or down,
 - knowing what programmes you have
 - adjust your volume control, beeps or programme settings
 - checking your ears for wax
 - arranging another appointment for a hearing test
 - making new earmoulds
- The drop in clinic cannot help you with:
 - more significant changes to the sound quality of your hearing aid
 - hearing rechecks
- How can you find out what programmes you have on the hearing aids
 - You can contact the department and ask for a telephone follow up to discuss your programmes or ask for an audiologist to send you a list of your programmes in the post or by email

As regards texting service for communicating with hospital doctors etc - I know that Karen Lamming - Anna's boss - is working on a project through RSCH but it will take some time of course. Can Anna give an update on this?

Karen has updated Anna that this is currently with Karen and she is struggling to get the time to speak to information governance about this. But it is still very much on her 'To do list'.

Question 6

Are handbooks for hearing aids available?

- Yes, all patients are offered our own audiology department hearing aid leaflets along with the manufacturers leaflet. If you already have hearing aids and would like either leaflet, please do ask, we have plenty.

Question 7

Are the small hearing aids that are inserted into the ear available on the NHS? Are they suitable for all types of hearing loss?

- You are describing the in the ear (ITE) hearing aid. Unfortunately we are unable to offer the ITE hearing aids on the NHS, there are a few reasons for this:
 - The only difference between these smaller hearing aids and behind the ear (BTE) hearing aids is the size rather than technology. As with other aspects of NHS care, we aim to provide good up to date technology in the most cost effective way. Therefore on the NHS you can be guaranteed a hearing of good technology but not smallest hearing aid.
 - These hearing aids are at much more risk of breaking as they are more likely to come in to direct contact with wax and other debris in the ear. Therefore the cost of repair is often much more expensive, something we cannot afford for every patient on the NHS.

If the hearing aid goes wrong, in most cases we cannot fix it in house and it has to be sent back to the manufacturer. This can result in you being without your hearing aid for 6-8 weeks.

- If you decided that you no longer wished to wear the ITE hearing aid, unlike with BTEs we cannot refurbish these aids for another patient as they are only shaped to fit in one ear.
- ITEs are only suitable for patient with a mild to moderate hearing loss. People with severe to profound hearing losses will find this type of hearing aid will not give them enough volume without whistling. It is important to remember ITEs will not improve the sound quality they often look cosmetically less visible. In addition, for severe to profound hearing losses, often the hearing aid has to be so big that it becomes more bulky and uncomfortable than the style you can have behind the ear.

Question 8

Typically how many programmes can a hearing aid accommodate?

- Most of our NHS hearing aids can accommodate between 3 and 4 programmes depending on the hearing aid you have.

Is T Loop a standard programme on hearing aids provided by RSCH, and if not why not?

- The loop system can be added to all of our hearing aids. All patients at their fitting appointment are given the choice of what programmes they would like on their hearing aids. Some patients find having lots of programmes on their hearing aids at their initial appointment overwhelming. If this is the case they are more than welcome to return to the repair clinic to have the loop system added at any time.

Question 9

I have heard somewhere that hearing aids could be damaged by X-rays, but my dentist disputes that. When should we be taking care?

- The typical advice from hearing aid manufacturers is the following:
 - Special medical or dental examination may adversely affect the correct functioning of your hearing aids. Remove and keep them outside the examination room before undergoing medical or dental examination with x-ray, MRI scan or CT scan.
 - Hearing aids don't need to be removed when passing security gates – if an x-ray is used it is in such low doses it will not affect the hearing aids

Question 10

I would like to understand the reasons why hearing aids squeak. My new ones are rather prone to do this and I cannot always tell why.

There are a few reasons why your hearing aids may whistle (squeak) and if you attend our clinics, the audiologist will typically run through the below list to determine what the problem may be

- The most common reason is wax. If you have wax, the sound will bounce off the wax, back towards the hearing aid and create a 'feedback loop'.
- The second most common reason for whistling is incorrect fitting of the hearing aid, this is because if the fitting is not sitting correctly sound can escape from the ear towards the ear creating a 'feedback loop'. Therefore, we will check with you that you can get the hearing aid in fully and correctly.
- The third most common reason for whistling is an inadequate earmould. If your earmould is not tight enough sound will again escape creating a 'feedback loop'. Therefore we may suggest you have a tighter earmould or if you have an open fitting, swap to an earmould.
- If all the above have been explored and resolved, the hearing aid settings may need adjusting. We only adjust the settings of the hearing aids if all other causes have been resolved. Typically the only way to get rid of whistling at this stage is to turn down the hearing aid.

Question 11

I should like to ask about the problem I have with my right side hearing aid. Mostly it echoes my own voice and is impossible to wear!! No problem with the aid on the left side. I have mentioned this many times to RSCH audiology dept but no help given!

It is difficult to answer your specific case without seeing your hearing test. There are many reasons why a hearing aid echoes your own voice.

- Echoing of your own voice often happens when you have not worn the hearing aid for enough time to get used to, have you worn the right aid for as long as your left aid?
- If your hearing loss is different in your right ear to your left ear this may well effect the sound quality, but as I say above I would need your specific hearing test results to determine this
- It may be that the earmould in your right ear is not suitable for your hearing loss, if the mould is too tight this can cause echoing, but again I would need to see your hearing test to see what I could suggest.
- If you are still struggling with the aid please do come back and see us and we will do our best to try and resolve the problem. In some cases we cannot solve the problem, but I would hope we can explain why it is not possible and therefore it gives you a better understanding of what you can expect from your hearing aids.

Question 12

If a patient loses their Oticon hearing aids, would their replacement hearing aids be Phonak or Oticon? Will the RSCH be charging for replacement hearing aids? If so at what date would this start?

- If a patient loses their oticon hearing aid their replacement hearing aid would be a refurbished oticon aid. Every hearing aid returned by a patient is sent off to be refurbished and therefore we use these hearing aids for those that lose them. This is our policy because refurbished aids are cheaper than a new hearing aid.
- We do not current charge for replacement hearing aids. We are keen to bring this policy in to place, but firstly need to write a policy and agree this policy with our finance department. We have not started this process as yet so there is no agreed start date.

Question 13

What are the benefits of having hearing aids synchronised (and can we have a definition of that feature please).

A synchronised hearing aid essentially means the two hearing aids work as a pair this can be beneficial in a number of ways:

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1. The hearing aids can work together to improve your ability to hear in different environments. For example if you are listening to sound to your right hand side the hearing aid microphones will work together to focus on this sound and away from the sounds you don't wish to hear. They do this using directional microphones and with noise management features. In theory this sounds great, the difficulty comes when the hearing aid thinks you want to hear a different sound to the one you actually wish to hear
 2. The hearing aids can work together in terms of the programmes. So if you wish to use the loop system on both hearing aids it is easier just to select it on one hearing aid.
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3. The hearing aids can work together in terms of volume control. If you turn one aid up you can also turn the other hearing aid up. This very much comes down to personal preference; many of my patients prefer to have control of the volume on each hearing aid whilst others prefer to control both together by just adjusting one of their hearing aids.
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Question 14

How does earwax travel towards the outside of the ear?

Wax is a good thing as it collects dust and dirt particles in the ear canal. The wax is partially made of skin and the dead skin cells naturally travel with the wax out of the ear. This process can be slowed down by a number of factors:

- 1) Age – as you get older the movement of the dead skin/wax often slows down
- 2) Amount of wax – the more wax you produce the less likely it will travel out of your ear and get blocked. Why might you produce more wax? Typically due to your genetics or if you work in a dusty/dirty environment resulting in more particles in your ear to be collected
- 3) Something stopping this process – e.g. hearing aids are sat in the ear canal and therefore are in the way of the wax moving out of the ear
- 4) Making things worse – the reason why audiologists always say cotton buds must not be put in the ears is because this pushes wax back in to the ear and makes the process of wax coming out of the ear worse (it can even push the wax in to the ear drum and cause a burst ear drum)

Question 15

Are other drops such as Otex any more effective than olive oil in softening wax?

ENT consultants always recommend the use of olive oil only. This is the most effective method of softening wax. You can buy oil with dispensing pipettes from pharmacies. Unfortunately if you have a tendency to build up wax, whatever product you use, it will not get rid of the wax. It has also been stated that Otex can be irritating for your ear canal skin as it is acidic. In addition Otex does not tend to soften wax, rather turns wax in to hard lumps, with the aim that the lumps will fall out of your ear canal. The problem is that in most cases, there is too much wax for this to work.

Question 16

Is it possible to see wax in the ear canal without an otoscope by pulling back the pinna?

One frustration is finding out whether the ear is clear enough before attending audiology. It means a visit to the GP, probably with a follow-up. Recently the Spec Savers audiologist very kindly inspected my ear (without charge). Then I went to have it syringed.

Some time ago when my GP found wax in my ear she suggested self irrigation and gave me a copy of their own guide. Shortly afterwards I saw her again and the irrigation had been successful. On later occasions it has not worked so well. I suppose that with this kind of irrigation there is very little risk of damaging the eardrum, unlike the electric syringe used at the GP surgery which always comes with a warning.

Unfortunately it is not possible to see wax in the ear without an otoscope as it is a dark, small space. The otoscope allows us to see wax as it lights up the ear canal and also enlarges what we are looking at. In addition wax is usually a fair way in to the ear canal so not at all easy to see at the entrance.

Audiologists do not recommend self irrigation. Unfortunately wax removal services are very rarely available through GP surgeries currently as they are not required to provide this service. Audiology departments are not obliged to offer this service and we currently do not have the resources for this. To avoid delays in audiology care, we are looking at ways to provide a more readily available wax removal service.

We recommend at present you speak to your GP surgery about wax removal, but we do not recommend you use self irrigation. The best option for wax removal is microsuction by a qualified professional. If this is not available, as long as you do not have a perforated ear drum, an electric syringe by a qualified professional is reasonable.

Question 17 https://en.wikipedia.org/wiki/Earwax#cite_note-NIHR-Clegg-28

I found this article illuminating. I learnt that the secretions of the ear canal are every bit as complex as tears. There are also some horror stories about methods of removing wax.

Excess earwax (quoted from Wikipedia) Excessive earwax may impede the passage of sound in the ear canal, causing conductive hearing loss. Hearing aids may be associated with increased earwax impaction. It is also estimated to be the cause of 60–80% of hearing aid faults.

Would Anna please comment on this, and on the reason given for wearing hearing aids all day being that the brain needs to adapt and remain adapted.

It is well known wax build up is increased by wearing hearing aids due to it stopping the natural process of wax travelling to the outer ear (see question 14). Even so, it is not common that wax build up is so excessive resulting in a conductive loss.

There is no evidence that removing your hearing aids for a few hours a day helps reduce the build-up of wax. In addition, although hearing aids do increase the risk of wax, age and a tendency for wax build up are also big contributing factors, therefore to what extent the hearing aid increases wax build up is largely unknown.

In general I would think the benefits of getting used to hearing aids by wearing them for many hours a day, outweighs the disadvantage that you may need regular wax removal. However this comes down to individual preference, and only you can decide what your priorities are in terms of hearing/wax build up.