



North East Regional Cochlear Implant Programme

Information about Adult Rehabilitation,
Switch-on and Tuning following
Cochlear Implantation

Patient Information

Planned Care Centre
Audiology Department

I've had my cochlear implant surgery.

What happens now?

Now you have had your cochlear implant surgery you will be sent three **tuning and mapping appointments** and three **rehabilitation appointments**. These appointments will start approximately three weeks after the surgery. In the meantime, it is important you keep the wound and scar clean to avoid infection. Should you notice anything unusual about it such as pain, burning sensation, soreness, discharge or it is hot to the touch, please contact the office immediately for advice during office hours. It may be essential for you to be checked by one of our ENT surgeons to prevent or treat any infections which could cause further problems or delay the device switch-on.

Out of office hours: James Cook Hospital patients please contact the ward where you stayed (usually ward 35) through the hospital switchboard to ask advice. Freeman Hospital patients please attend local A&E, GP or walk in centre who will contact the on-call registrar at Freeman Hospital.

First tuning appointment: Switch-on or Initial Stimulation. This is when your processor is connected to the internal implant and is usually done three to four weeks after your surgery.

Why do I have to wait three weeks?

This is to give you enough time to recover from your surgery and for the wound to heal properly. There is usually some swelling around the implant site which takes a few weeks to settle down. This is important as it could affect the wearing of the coil or headpiece as sometimes even the strongest magnet is not enough to keep it in place. This would make it difficult

for the sound processor to send the signals to the internal part.

What happens in the 'switch on' appointment?

Appointments usually last for about 60 - 90 minutes. The audiologist will check the implant site. They will also check that the magnet strength for the headpiece or coil is just right. In some cases, a stronger magnet is needed initially, but may be reduced as the scar and swelling settles completely over time.

Your external sound processor will then be connected to the computer which allows the audiologist to start tuning. The audiologist carries out a quick test of the electrodes first to make sure that these are all working fine. There are occasions, although rare, where electrodes will have to be disabled if they show unusual activity. If this occurs, your audiologist will explain this to you in more detail.

Once this is done, the audiologist starts the mapping or tuning. This is the process of converting acoustical speech signals into electrical stimulation. To measure this, the stimulation will be presented as beeps where you will either be asked to count the number of beeps that you hear or to rate their loudness. Once this is established, the audiologist will then switch it on to live mode.

To start with, what you hear may just be noises. It will take a while for your brain to adapt to the sound of your cochlear implant. During the first session, even a small amount of stimulation usually sounds loud. Your levels will gradually increase over time as you get used to your implant. As the levels increase, the sound quality usually improves.

How often do I need to see the audiologist for tuning

This will vary for every patient, depending on how quickly the levels stabilise but you should expect to have more frequent tunings within the first year of having a cochlear implant.

However, the standard guideline we follow is as below:

1st tuning (switch-on)	=	three weeks after surgery
2nd tuning	=	one week after switch-on
3rd tuning	=	two weeks after 2nd tuning
3 month review	=	two month after 3rd tuning
6 month review	=	three months after 4th tuning
12 month review	=	six months after 5th tuning
24 month review	=	either six months or one year after 6th tuning

The number and frequency of your tuning appointments will depend on clinical need which will be decided by your audiologist. Some patients may require more tuning appointments than others to ensure that the levels are always set to maximise benefit.

Once the audiologist is satisfied with the stability of your map / tuning, you will no longer be required to attend tuning appointment unless you have any problems with your cochlear implant. However, we will continue to support you in maintaining your equipment as needed.

What is involved in the rehabilitation sessions?

The aim of these sessions is to help you get the maximum benefit from your cochlear implant. We will set appropriate aims for each session and may give you work to do at home to achieve these aims. Some of the things we may do in these sessions would include tasks like:

- Listening to speech in quiet and noise
- Introduction to environmental sounds
- Counselling and support
- Use of environmental aids such as loop systems, telephone practice.

How many rehabilitation sessions do I have?

Everyone will have a minimum of seven sessions in the first year of implantation and these are at set times. Obviously everyone is different and you may need to attend more rehabilitation sessions but your keyworker will discuss this with you.

A typical schedule may be:

First rehabilitation session after initial tuning: We will discuss what you can expect during the first week after initial tuning. We will also discuss the care and maintenance of the cochlear implant with you and your family. We will give you an environmental sounds checklist and we will agree targets for the next rehabilitation session.

One week after initial tuning: We will discuss previous aims and how you got on during the last week. We will introduce some environmental sounds to see what you can identify. We will agree new targets for the next rehabilitation session.



Three weeks after initial tuning: We will discuss previous aims and how you got on since the last session. We will agree new targets for the next rehabilitation session.



Six weeks after initial tuning: We will discuss previous aims and how you got on since the last session. We will agree new targets for the next rehabilitation session.



Twelve weeks after initial tuning: The questionnaires which you did during the assessment will be repeated. We will agree new targets for the next rehabilitation session.



Six months after initial tuning: The questionnaires which you did during the assessment will be discussed. We will agree new targets for the next rehabilitation session.



One year after initial tuning: The questionnaires which you did during the assessment will be repeated.

What do I do if I have any problems?

For any queries or concerns about your cochlear implant, please contact us in the office and we will try our best to answer your questions.

Please do not just turn up as it is likely that all the audiologists will be busy with other patients and will not be able to see you.

Comments, compliments, concerns or complaints

South Tees Hospitals NHS Foundation Trust is concerned about the quality of care you receive and strives to maintain high standards of health care.

However we do appreciate that there may be an occasion where you, or your family, feel dissatisfied with the standard of service you receive. Please do not hesitate to tell us about your concerns as this helps us to learn from your experience and to improve services for future patients.

Patient Advice and Liaison Service (PALS)

This service aims to advise and support patients, families and carers and help sort out problems quickly on your behalf.

This service is available, and based, at The James Cook University Hospital but also covers the Friarage Hospital in Northallerton, our community hospitals and community health services. Please ask a member of staff for further information.

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