

Children's audiology

Hearing assessment under sedation

Information for patients, relatives and carers

Introduction

Your child has been referred for a hearing assessment under sedation. This leaflet will give you some details about your child's appointment. It does not replace the discussion with your care team.

Why does my child need a hearing assessment under sedation?

Your child has been referred for a hearing assessment under sedation for one of two reasons:

- Your child was seen before for behavioural hearing assessments. We could not get results that were complete or reliable.
- Your child was seen for hearing assessments following the new-born hearing screen. We could not get results under natural sleep that were complete or reliable.

What will the appointment involve?

The day and time for your child's test will be on their appointment letter. Bring them to paediatric outpatients on the **6th floor of QEQM building at St. Mary's Hospital** for this time. This will usually be **09:30am**. You can expect to be in the hospital until lunchtime.

Sedation

1. Your child will be greeted and assessed by the nurses. They will ask questions about your child's health and perform other clinical observations.
2. A children's doctor (paediatrician) will ask you some questions to make sure sedation is appropriate and safe for your child. You will be asked if you consent to the sedation.
3. With your consent, the nurses will give the liquid sedation orally (in your child's mouth). Your child will need to swallow most of the medication for it to work. This may cause them distress. In some rare cases, it might be more suitable to use nasal spray or a suppository instead.
4. Sedation can take between 30 minutes to an hour to make your child fall asleep. Your child may become agitated and distressed during this time. Sometimes a child may resist the urge to sleep, or the sedation may not be effective. If the child is not asleep after an hour, a second dose of sedation may be offered. Rarely, sedation may not be effective.

Audiological assessment

The audiologist will do the hearing assessment once your child is in a settled sleep.

This will usually involve an assessment called an **auditory brainstem response (ABR)**. But it may also involve other audiological assessments such as:

- tympanometry
- otoacoustic emissions (OAEs)
- auditory steady state response (ASSR)

All the tests are non-invasive. This means the skin is not broken in any way.

The audiologist will decide what assessments and testing to do based on your child's case history and previous assessment results.

Skin preparation

Once they are asleep, your child's skin will be prepared for testing. It will be cleaned with a gel to remove any dead skin, hair and oils from the surface. This is not painful for your child. This helps to ensure high quality recordings can be obtained. It leads to more accurate results.

Placing electrodes

An audiologist places small earphones in the child's ears and soft electrodes (small sensor stickers) near the ears and on the forehead. Clicking sounds and tones go through the earphones, and electrodes measure how the hearing nerves and brain respond to the sounds.



This is not painful. The pictures below show where the electrodes will be put.

Find out how hearing tests work

www.ndcs.org.uk/information-and-support/childhood-deafness/hearing-tests/

The nurses will also attach a monitor to your child's hand or foot. This lets them monitor your child's heart rate, respiratory rate and oxygen saturation levels while they are asleep.

Waking up

When the test is over, the sedation will wear off. Your child will wake up naturally or you will need to wake them up. Before your child can go home, the nurses will want to see them:

- eat and drink, and walk steadily

This may take some time. They are likely to be drowsy when they wake up. They may seem drowsy for the rest of the day

Results

Once testing is complete, the **results will be explained to you on the day**. You can agree your child's future management plan with the audiologist. All results will also be subject to internal or external peer review

How can I prepare for this appointment?

Make sure your child is well

Your child will need to be well and healthy to undergo sedation. So, please tell the audiology team as soon as possible if at any time in the week before, your child:

- becomes unwell
- has a cough
- is congested
- has a runny nose

We can rearrange your appointment. You can find our contact details at the end of this leaflet or on your appointment letter.

Follow the no eating and no drinking (fasting) rules

Your child will need to have stopped eating and drinking (fasted) for a time before being sedated. This means:

- No clear fluid (such as water) for up to 2 hours before your appointment.
- No breast milk for up to 4 hours before the appointment.
- No food, juice or bottled milk for up to 6 hours before your appointment.

This means if your child's appointment time is at 09:30 am, they will not be able to drink water from 07:30am, take breast milk from 05:30am and eat from 03:30am.

Bring comfort toys or blankets

Your child will need to fall asleep for the test. So please bring any toys or blankets which soothe them and may help them feel relaxed to go to sleep.

Bring food for after the test

Your child will be hungry when they wake up. We encourage you to bring some food and drink they enjoy with you so they can eat something when they wake up. There are food options available to buy in the hospital, but these can be limited, for example, sandwiches.

Be prepared for your wait

You will have to stay with your child for the full appointment so please bring anything you may need for this time. For example, food and drink for yourself or a phone charger. It will be dark and quiet in the room for an extended time, so please avoid bringing other children to the appointment where possible.

What is sedation?

- Sedation is when **medication is given to induce relaxation or sleep** for a procedure. In this appointment the medication will aim to induce sleep. This is known as deep sedation. It is needed to keep your child still during the assessment, which is essential to get useful results.
- **Sedation is less invasive, requires less equipment and has fewer possible side effects than general anaesthesia.** Although your child is asleep, they will likely be able to be woken naturally unlike with anaesthesia.
- The sedative administered is **chloral hydrate and alimenazine**. In some cases, **midazolam may be used**. These sedatives are recommended by the [National Institute for Health and Care Excellence \(NICE\)](#) for children and young people.

Further information

For further information regarding your child's hearing test, please visit:

<https://www.ndcs.org.uk/documents-and-resources/understanding-your-childs-hearing-tests/>

Contact details

If you are unable to attend your appointment or have any questions or concerns, please call or email us on the following numbers:

Charing Cross Hospital

Tel: 0203 311 1020

Email: childrens.hearing@nhs.net

St. Mary's Hospital

Tel: 020 3312 2448

Email: smpaediatic.audiology@nhs.net

How do I make a comment about my visit?

We aim to provide the best possible service, and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3312 7777** (10.00 – 16.00, Monday to Friday). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street
London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: **020 3312 1337 / 1349**

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team:
imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

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