

Patient information factsheet

Baby auditory brainstem response (ABR) test

We have given you this factsheet because your baby has been referred for an auditory brainstem response (ABR) test. It explains what an ABR test is and what will happen at your baby's appointment, so that you know what to expect and can help prepare your baby. We hope it will help to answer some of the questions you may have. If you have any further questions or concerns, please speak to a member of our team.

What is an auditory brainstem response (ABR) test?

An ABR test is a non-invasive test that uses electrodes (recording pads that measure brain activity) to measure how well sounds reach your baby's brainstem. Your baby's brain's response to sound will be measured via waveforms on a computer screen.

The test can only be completed when your baby is asleep. This is because their ear's response to a sound is very tiny and can easily be hidden by the movement of nearby muscles when they are awake.

Why does my baby need this test?

Your baby may have been referred for this test if:

- the newborn hearing screening programme (NHSP) suggested more testing was required
- they have recently been unwell
- they are not responding to sounds as expected

How does this ABR test differ from the NHSP test my baby has had already?

The NHSP test is a screening test, so only a 'pass' or 'refer' result is possible. A 'refer' result does not necessarily mean your baby has a hearing problem, but it does mean further tests are needed to check your baby's hearing. The ABR test will provide us with more detailed information about your baby's hearing.

What will happen on the day of the test?

We will carry out the test while your baby sleeps naturally. If possible, please try and keep your baby awake before the test and have them ready for a feed soon after you arrive for your appointment. This will help to ensure your baby sleeps well during the test.

Before the test begins, we will place three sticky pads (electrodes) on your baby's head (on their forehead and behind each ear). We will then attach these to recording wires in order to record the signals from the ears. The sticky pads are specifically designed for babies' sensitive skin. As babies often sleep after being fed, we recommend giving your baby a feed after the pads have been applied.

We will play the sounds to your baby through small earplugs or normal headphones. We will test each ear separately. We may ask you to help hold the headphone over your baby's ear or check that the earplug remains in place during the test.

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Will the test cause my baby any pain or discomfort?

An ABR test is a safe and painless test. Most babies do not enjoy the preparation for the test (cleaning the skin and applying the sticky pads) and they may cry, but this is a normal response and is not a result of pain.

How loud will the test sounds be?

The volume of the sounds will vary from quiet to normal conversation levels. Sometimes we may use slightly louder levels.

How long will the test take?

The test usually takes around 30 to 60 minutes. Babies often take a while to settle and go to sleep, so we will book you in for a three-hour appointment slot to allow for this.

Will I be able to stay with my baby for the test?

You will be able to stay with your baby during the test. Please do not bring other children with you to this appointment.

When will I receive the results?

We will usually be able to give you your baby's results straight after the test. However, this is not always possible. If this is the case, we will give you a ring once we have analysed the results to arrange another appointment to talk through what we found and answer any questions you may have.

A selection of individual test results will be externally reviewed for quality control purposes. This is to make sure we are offering you the best possible service. All identifiable information will be made anonymous. This means your baby's personal details will be hidden. Please speak to us if you have any questions about this process.

What should I do if I can't attend the appointment?

Please let us know as soon as possible if you can't attend the appointment. This will allow us to offer the three-hour appointment slot to another family.

We understand that it is not always possible to get to an appointment and you may need to cancel on the day. If this is the case, please let us know as soon as you can so that we can arrange another appointment for you.

Contact us

If you have any questions or concerns, please contact us.

Audiology and hearing therapy department
Level A
The Royal South Hants Hospital
Brintons Terrace
Southampton
Hampshire
SO14 0YG

Telephone: **023 8120 2997**

Email: rshaudiology@uhs.nhs.uk

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