Auditory Brainstem Response (ABR) Evaluation

Definition

Gillette’s audiologist uses an auditory brainstem response (ABR) evaluation to measure how your child’s ears receive sound and send it through the auditory nerve to the brainstem. This test does not require your child to actively respond to a sound.

Why does your child need this type of hearing test?

Some patients are unable to provide reliable responses during a behavioral test of hearing. An ABR test is another way to gather information about the quietest sound levels that each ear can detect at different frequencies (pitches). Many times, information acquired during ABR testing rules out significant hearing loss. If your child does show a hearing loss, ABR information allows the audiologist to plan appropriate treatment for your child.

Preparing for Your Child’s Appointment

Keep your child’s face free from lotions or creams. These can interfere with ideal electrode placement.

What to Expect

- **Before the Test** We often complete ABR testing while a child sleeps under sedation in the operating room. The test can occur on its own or in conjunction with other required sedated procedures, such as magnetic resonance imaging (MRI) or dental work. Sometimes we complete ABR testing without sedation, depending on a child’s ability to tolerate the evaluation. Our audiologist can help determine which conditions for giving the test are most appropriate for your child.

- **During the Test** During ABR testing, the audiologist places several sticky electrodes on your child’s forehead and near each ear. We place a small earphone in each ear so we can play specific sounds. The electrodes pick up responses and a computer records them. The audiologist analyzes these results during the test.

ABR testing usually takes about an hour, but the time required varies depending on how much information we need to obtain about a child. If your child is also undergoing other procedures while sedated, the total time in the operating room might be longer.

- **After the Test** ABR testing is painless and doesn’t cause any harm to patients.

Results

The audiologist will review the ABR results with you immediately following the evaluation. We can then work with you to determine an appropriate follow-up treatment plan for your child.

**Make An Appointment** 651-290-8707  **Refer a Patient** 651-325-2200

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at 651-229-3890.

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