

## **UNSEDATED** ABR INSTRUCTIONS: NEWBORN TO 6 MONTHS

## Please Read These Instructions Carefully

Your child has been scheduled for a special hearing test called a threshold Auditory Brainstem Response (ABR), most commonly abbreviated as ABR. The ABR evaluation is a test that evaluates how well the sound travels from the ear to the level of the brainstem. ABR responses are recorded by placing 3 stickers called electrodes on the child, one on his/her forehead and one behind each ear, and then stimulating the ear with brief auditory signals via insert earphones.

By placing electrodes on the child's head, the ABR is testing the neural electrical activity from areas within the cochlea, 8th nerve, and the brainstem in response to an auditory stimulus. This neural activity allows the audiologist to mark responses on the waves recorded in response to stimulation presented at different intensity levels across low and high frequencies or pitches. The lowest level at which neural responses are obtained is considered the threshold of hearing for that particular frequency.

ABR test is performed while the patient is asleep as noise and movement can affect test results. If the child is younger than 5-6 months, ABR can most likely be done while the child is naturally sleeping in our office.

What is the difference between screening ABR and diagnostic ABR? Automated Auditory Brainstem Response (AABR) is used as a screening test in newborn babies. Newborn babies are screened for hearing loss prior to hospital discharge. Screening tests are performed using one loudness level and the baby either passes or fails the screen. Newborns or infants who do not pass the initial screen are re-screened either prior to discharge or as a separate visit. Infants not passing in one or both ears after two screening attempts are referred for a diagnostic ABR evaluation to further evaluate their auditory function at different loudness levels across frequencies.

In order to obtain reliable information regarding your baby's hearing status, your baby must sleep soundly during testing. We will need your assistance with the following:

- PLEASE DO NOT let him/her sleep on the way to the appointment. It may be helpful to have a friend or family member drive you to the appointment so you can keep your baby awake during the drive.
- PLEASE DO NOT feed your baby within an hour prior to the appointment. A private area will be provided for you to feed your baby upon arriving to our office.
- You should bring a bottle or plan to nurse your baby upon arrival to our office, please wait to begin the feeding until the audiologist has brought you back to the test room.
- You should bring a blanket, swaddle, car seat carrier, or stroller in to the appointment so your baby will be comfortable during the testing.
- Most parents find it helpful to bring a friend or family member to the appointment with them as we will be discussing the results after the test.