

The Sedated Auditory Brainstem Response (ABR) Test



Audiology and Speech Language Pathology Department

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Your Child's Appointment

Your child has been scheduled for a Sedated Auditory Brainstem Response (ABR) test:

Arrival time in the Audiology Department:

9:00 AM _____ 1:00 PM _____

You and your child will be at the hospital for up to 3 hours.

Make child care arrangements for your other children. The test room must be quiet, siblings cannot be present. If you need to bring other children with you, please bring another adult to look after them.

PLEASE NOTE:

The test results may be affected if your child is sick.

 Please call the Ear, Nose, and Throat (ENT) Clinic Nurse at 604-875-2345 local 7053, or toll free anywhere in BC at 1-888-300-3088 local 7053 if your child has:

- A rash, cold, flu, fever, diarrhea or vomiting up to 2 weeks before the ABR test.
- Been in contact with a person that is infectious (e.g., measles, chickenpox) 3 weeks before the ABR test.

What is an (ABR) Test?

An ABR tests the hearing pathways. It measures how the hearing nerve and brainstem respond to sounds and helps us understand how your baby hears.

This test is done by an Audiologist (hearing specialist) in a sound proof room while your child is sleeping.



How is it done?

1. You and your child will meet with the ENT Clinic Nurse. Your child's heart rate, breathing chest sounds, and weight will be checked.
2. An Otolaryngologist (ENT Doctor) will examine your child and prescribe a mild sleeping medicine (Chloral Hydrate).
3. Before the ABR test, the Audiologist may do a few other hearing tests while your child is still awake.
4. The Nurse will give your child Choral Hydrate (sleep medicine) to swallow. Unfortunately, this medicine has an unpleasant taste.
5. You can hold your child until he or she falls asleep. You will then be asked to place your child on a bed next to the equipment. The Nurse will monitor your child until he or she wakes up.
6. The Audiologist will place recording sensors on your child's forehead and behind each ear. Earphones will be put inside your child's ears. A computer then sends clicks and tones of different loudness through the earphones. As your child hears the sounds, the recording sensors pick up the responses from the hearing nerve and brainstem. These responses are known as waveforms. The Audiologist will interpret these waveforms.
7. At the end of the test the Audiologist will discuss the results with you.

The procedure is not painful.

Why must my child be asleep during the test?

Your child must remain very still during the test. Any movement of the head, neck or jaw will cause false responses that can interfere with the accuracy of the results.

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Before the Sedated ABR: Important Instructions

Eating and Drinking:

Solid foods **5 hours** before the ABR test time.

- If your child's ABR test is in the morning, your child should not have solid foods or milk after 4:30 am.
- If your child's ABR test is in the afternoon, your child should not have solid foods or milk after 8:30 am.
- Solid foods also include liquids with solid components (e.g. orange juice, soup broth) as well as jello.

If your child is under 1 year:

 Milk feeds (breast milk, milk or formula) **4 hours** before the ABR test time.

- If your child's ABR test is in the morning, your child should not have milk after 5:30 am.
- If your child's ABR test is in the afternoon, your child should not have milk after 9:30 am.

 Clear fluids **2 hours** before the ABR test time.

- If your child's ABR Test is in the morning, your child should not have clear fluids after 7:30 am.
- If your child's ABR Test is in the afternoon, your child should not have clear fluids after 11:30 am.
- Clear fluids are water or apple juice.
- Sugar solutions, ginger ale, jello, orange juice, cola drinks and milk are **NOT** clear fluids.

Carefully follow the eating and drinking instructions above. Your child must have an empty stomach to be given the Chloral Hydrate. The test may be postponed if your child has had anything to eat or drink.

Sleeping:

The night before your child's ABR test

- Keep your child awake as late as possible the night before the ABR test. Less sleep the night before is helpful in having a successful ABR test.
- Offer your child a healthy late night snack.

The morning of your child's ABR test

- Wake your child early on the morning of the ABR test. Keep your child awake until the ABR test time. **Do not let your child fall asleep in the car on the drive to the hospital.**
- Have your child wear comfortable clothing or pajamas.

The ENT Clinic Nurse will contact you before the ABR test and go over these instructions with you.

What to bring for your child's ABR test:

- A favorite blanket or toy may help your child sleep.
- A light snack and something to drink for your child after the ABR test, (crackers and juice for example).

Will my child need any special care after the test?

A cool cloth is sometimes used on your child's face to help him or her wake up. The Nurse will make sure your child awakens from the medicine. You may take your child home as soon as it is medically safe. This is usually about 1/2 an hour after the ABR test ends.

Your child may be a little sleepy and unsteady on his or her feet for the rest of the day. Your child may also pass a lot of gas. These are side effects of the sleeping medicine and will go away.

The Nurse will give you written guidelines for feeding, activity, and any follow-up care.



If you have any questions, please call 604-875-2345 local 7053 or toll free 1-888-300-3088 local 7053.

At BC Children's Hospital you are an important member of your child's health care team. Please ask questions so you understand and can be part of decisions about your child's care and treatment.

It's good to ask!