

What is Ambulatory Monitoring?

During ambulatory monitoring, your child wears a small, portable EEG machine in a backpack. It helps us to record a continuous EEG outside of the hospital while your child does his/her regular activities. This machine is the size of a walkman and can record for up to 18 hours.

Why Does My Child Need Ambulatory Monitoring?

Your child needs ambulatory monitoring because the doctor needs more information to make a diagnosis. With this test, we are trying to capture “events” that occur at home or at night during sleep. These events are not picked up during routine EEG recordings done in the hospital.

How Do I Prepare for the Test?

Plan to get to the hospital at least 20 minutes before your appointment time. It can be hard to find parking. Please come directly to the EEG Department in Room 1B10. If you did not receive a call from the hospital’s Admitting Department to register you in advance, you will need to do this when you arrive at the hospital. After you arrive at the EEG department, we will decide when it is best for you to return to Admitting.

Make sure your child’s hair is washed and dried the day before your appointment. Your child needs to wear a shirt that either buttons or zips up the front. This is because nothing can be pulled over your child’s head once the wires are attached.

Unless your doctor has told you otherwise, give your child his/her medication as usual.

What Happens at the Hospital?

Before getting your child set up, the technologist will ask you to describe the events that we are trying to capture. The same number of electrodes (25) is applied as for a routine EEG. The electrodes are applied with special hair glue that is dried with a small hairdryer. The electrodes are covered with a hat (similar to a bathing cap). **Your child must wear this hat at all times during the monitoring.**

Once the electrodes are applied to your child’s head, they are attached to a small, battery-operated computer. The computer is put into a backpack that your child will wear or carry with him/her at all times during the monitoring. This backpack weighs about 2 pounds (just under 1 kg).

The entire set-up time takes about 1 ½ hours.

Before you leave the department the technologist will show you how the equipment works and what you will be asked to do.

The technologist will also show you how to check the machine every so often to make sure that everything is running properly.



How Do I Monitor My Child at Home?

You or a responsible adult must be with your child **at all** times during the monitoring. The equipment is very expensive and you are responsible for its safety once you leave the hospital. You will need to sign a release form stating that you accept responsibility for the equipment.

If you are worried that:

- you cannot keep the equipment safe,
- your child will not be able to handle having the wires on for 24 hours,
- you cannot have someone with your child for the full time for the monitoring, or
- you have other serious concerns

Please call the department before your appointment and ask to speak to the head technologist.

How Do I Use Alarm/Event Button?

Attached to the computer is an alarm/event button. When your child has an “event,” **press the alarm/event button.**

This will be a guide for the doctor when he/she reads the test. The beginning of an event gives us the best information so press the button as soon as possible after the event starts.

How Do I Use the Diary?

You will get a diary which has instructions with it. In the diary, you must:

- write down the time of the event(s)
- describe what your child was doing at that time.

What Activities Can My Child Do During Monitoring?

Your child cannot shower or bath during the monitoring. The equipment must not be exposed to water.

Please keep your child home from school while he/she is being monitored unless the “events” in question happen only at school, or during school activities.

If your child is going to school, or will be with another caregiver (like a babysitter), explain the monitoring in advance to the teacher or the person with your child. It is best if you can stay with your child at school as you will understand how to work the alarm button and enter information in the diary.

It is important that your child does not do any “rough play” with the monitoring equipment. If your child is at school he/she **must not** participate in any sports, rough play, etc.

What Happens When We Return to the Hospital?

The technologist will detach the computer from the wires and check the data to make sure that everything worked correctly. This will take about 15 to 20 minutes.

What If My Child Does Not Have an Event?

It may be possible to monitor your child for another day if we do not capture any events on the first day. Unfortunately, sometimes the data we collect is of poor quality due to equipment problems or the electrodes have become loose. In these

cases we may need to monitor for an additional day. If possible, this will be the day following your original appointment. We will put new batteries in the computer and check that all the electrodes are in good working order (they do not need to be reapplied).

You must be able to stay with your child on the second day as you did on the first. If you are unable to stay with your child and cannot find another responsible adult to take your place we will not be able to continue monitoring.

Please contact us if your child has not had any “events” for a few days prior to your appointment time as it might be better to reschedule.

When Will I Know the Results?

Your child’s neurologist will have the results about two weeks after the monitoring. You will need to phone his/her office for an appointment (if you do not already have one) to discuss the results. The technologist cannot give you the results of the test.

Contact the EEG Department:
Area 1B10
604-875-2124.

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