Ambulatory EEG

Instructions for patients

Read this brochure to learn more about:

• What to expect before, during and after the test
• What to do at home
• Who to call for questions
Your doctor has ordered an ambulatory EEG to learn more about the seizures or other symptoms you are having.

An ambulatory EEG records the electrical activity of your brain for 1 to 3 days while you go about most of your normal daily activities at home.

This test takes 2 appointments at the Neurophysiology Laboratory at Toronto Western Hospital:

- The first appointment is to set-up the equipment for the EEG.
- The second appointment is to remove the equipment.

This information sheet tells you what to expect before, during and after the test. Please ask your doctor any questions that you have. If you agree to go ahead with the test, you will be asked to sign a consent form.

What is an ambulatory EEG?

- EEG stands for electroencephalogram. An EEG is a safe and painless test that records the electrical activity of your brain. You may have already had a routine EEG to record your brain activity for a short time at the hospital. The results of an EEG show how the different parts of your brain are working.
- An ambulatory EEG records your brain activity for 1 to 3 days while you are at home. Your doctor will tell you how long your test will be.
- This test will show your brain activity during different activities and at different times of the day and night.
- The information (data) that is recorded will help your doctor diagnose your condition and plan the best treatment.
What should I do before the set-up visit?

- The night before your appointment, wash your hair with only shampoo and water. **Do not use ANY hair products** such as conditioner, oil, gel or hairspray.
- Remove braids, wigs or hair extensions. You cannot wear them during the test.
- Please do not wear **any** liquid or powder foundation makeup on your face.
- Have comfortable clothing ready to wear during the test. Choose tops that open in the front and do not go over your head.
- Plan to bring someone with you to your appointments and have someone stay with you at home during the test. This person can record and describe any symptoms or events that you are not aware of.

What happens during the set-up visit?

The technologist in the lab will:

- Measure your head and mark where the electrodes will be placed. Electrodes are small discs that are placed on the surface of your skin to detect electrical activity in the brain.
- Rub the spot for each electrode with a gritty cream.
- Place a set of electrodes over your scalp. A removable glue holds the electrodes in place. The glue is dried with a hair drier.
- Place one electrode on the left side of your chest to record your heart rate.
- Connect the wires from each electrode to a small recording unit. The recording unit is kept in a pouch that you wear during the test. The pouch has a strap that you will wear across your body to prevent dropping the pouch.

The set-up appointment will take up to 2½ hours. If you have any questions, please ask the technologist.
• Cover your head with elastic netting to keep the electrodes and wires in place.

• Show you how to change the batteries in the recording unit each day. You will be given enough AA batteries to last during your test.

• Give you a handout that tells you when to change the batteries and when to return to have the electrodes removed.

• Show you how to use the diary on the handout to record what you do during the test and any symptoms or events that occur.

What should I do at home during the test?

• You may eat and drink as usual.

• Continue to take your regular medications as prescribed by your doctor.

• Do your routine activities. Avoid vigorous exercise and exposure to strong heat or sun as sweating may loosen the electrodes.

• Change the batteries in the recording unit once a day.

• If you have an event, push the event button on the recording unit.
• Use the diary to record your activities, symptoms and a brief description of each event. If you are unaware when you have symptoms, the person with you can push the button and complete the diary.

• Do not chew gum or candy. These movements can interfere with the recording.

• Do not scratch your head or try to move the electrodes.

• Do not shower or have a bath. The electrodes and recording unit must not get wet. You can wash below your chest.

**What happens at the return visit?**

• Bring your diary to this appointment, even if you have not had any events.

• The technologist will upload the data from the recording unit to the hospital’s computer system.

• The technologist will remove the electrodes using a liquid that dissolves the glue. This will take about 30 minutes. You may notice some redness where the electrodes were placed.

• Bring a comb or brush to tidy your hair, or bring a hat or scarf to wear home. When you get home, wash your hair to remove any remaining glue.

• The technologist will give you an instruction sheet for at-home hair care.

**When will I get the results of the test?**

• The results will not be available right away. A neurologist will analyze the recording and your diary and send a report to the doctor who ordered your test. As there is a lot of information to review, this may take up to 3 weeks.

• When the results are ready, your doctor will review them with you at your next appointment.
Who can I call if I have questions or concerns?

- If you have questions about the equipment or the test, call the Neurophysiology Lab at 416 603 5800, ext. 2060 between 8:00 am and 4:00 pm.
- If you have questions or concerns about your medical condition, please call the doctor who recommended this test.
- If it is an emergency, call 911 or go to the nearest hospital emergency department.