

Long-term ambulatory EEG recording

Purpose of the Examination

The examination records the electrical activity of the brain with a portable device. Long-term EEG (electroencephalography) recording is used to examine symptoms believed to be epileptic. These symptoms include, for example, absence spells, convulsions, or loss of consciousness.

Preparing for the Examination

Please ensure your hair is clean and dry when coming to the examination. Do not apply any hair products. If your work includes welding, wash your hair especially carefully. Accumulated metallic dust in your hair can cause several technical disturbances during the examination.

You can take any regularly prescribed medication as you normally would, unless you have received other instructions. Please bring along any information you have about the medication you are taking.

Avoid taking any non-regular medication (“as needed medication”) sleeping pills or other sedatives, including alcohol, 24 hours before and during the examination. However, if you cannot avoid using the above mentioned temporary medication, please mention them in the diary provided at the beginning of the examination.

It is recommended to wear clothing that can be opened from the front, because clothing pulled over your head can detach the measurement wires. You can wear a loose hat, cap or a scarf on your head if you wish to cover the wires attached to your head.

Examination Process

The skin on your face and head is cleaned at the beginning of the examination. Measurement wires are attached to your scalp with a water-soluble paste, which is dried using a blow dryer. Some of the wires are attached to your skin with tape. A loose cap is placed on your head to protect the wires. The wires are attached to a recording device that you will carry in a backpack or a purse for the duration of the examination.

You will also receive a notebook, in which you should keep track of daily activities, symptoms and sensations. Please ensure you also mark symptoms witnessed by people around you. Further instructions on filling out the diary will be given when the wires are attached.

The wire attachment takes about two hours, after which you can go home with the portable device.

You can move relatively freely during the examination. The device does not affect your daily life quite much, but you should not exercise or take part in sports that cause sweating. You should not take a shower or visit a sauna, either.

It is recommended to use a mobile phone as little as possible during the examination. Please mark in your diary if it is necessary for you to use your mobile phone. Other electrical devices do not disturb the examination.

The examination usually lasts for one to two days. Sometimes, a third examination day may be required. When the wires are attached, an appointment to the neurophysiological ward for the next day is scheduled to inspect the wires and to change the device battery. If the examination continues for another day, an additional appointment for the following day is scheduled to remove the wires.

After the Examination

The wires are removed with water. Possible residue from the paste will be washed away when you next wash your hair.

A clinical neurophysiologist will analyse the examination and write a report. The report is directed to the clinic that ordered the examination. They will inform you of the examination results and any possible follow-ups.

