

## **EEG examination after staying awake, adults**

### **Purpose of the Examination**

The EEG examination (electroencephalography) examination registers the electrical activity of the cortex. It is important to have a clear view of electrical activity of the brain during intense states of tiredness in some diseases, especially diseases that cause seizures.

### **Preparing for the Examination**

- You should **stay awake for the whole night** before the examination day. Not even dozing off is allowed.

**You are not allowed to drive a car under any circumstances on the examination day.** A night spent awake increases the possibility of seizures.

- Take any regularly taken medicine normally, unless you have received any other instructions.

Please bring along information about any medication you are taking. Temporary sedative medication, sleeping pills and alcohol need to be avoided 24 hours before the examination. However, if you cannot avoid using the medication mentioned above, please inform the EEG technician before the examination. You should report any recent seizures or injuries as well.

- You should have clean and dry hair when coming to the examination.

Do not apply hair spray, gel, or any other styling products after washing your hair. 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 eat normally before the examination. Coffee, tea, cola or energy drinks and other refreshing beverages are not allowed after midnight.

### **Examination Process**

The examination does not cause pain and it lasts for about an hour and a half. The skin on your face and head is cleaned at the beginning of the examination. A flexible cap with measurement sensors attached to it is placed on your head. In addition, measurement labels are attached on the surface of the skin on your face. Water-soluble conductor paste is applied between the measurement sensors and your skin. The sensors and the cap are attached to an EEG device,

The electrical activity of your brain, your eye movements, your heart rate, and the muscle tension in your jaw muscles, are recorded in the examination. The examination is also recorded on video.

During the recording, you will rest on a bed eyes closed, and you are occasionally requested to open your eyes. In addition, you may be requested to watch a bright light blinking at various frequencies, and to breathe deep briefly. You should stay awake during the beginning of the examination, but you are allowed to sleep later on.

### **After the Examination**

The conductor paste is washed from your hair and face with a moist towel. Possible residue from the conductor 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.