

## **EEG examination, adults**

### **Purpose of the Examination**

The electrical activity of the cortex (brain wave patterns) is recorded in an EEG (electroencephalography) examination. The examination is used to evaluate seizures and diagnose central nervous system diseases, such as epilepsy or inflammatory diseases.

### **Preparing for the Examination**

- Please ensure your hair is clean and dry 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 take any regularly prescribed medication as you normally would.

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 the examination.

However, if you cannot avoid using the above mentioned temporary medication, please inform the physician before the examination. You should also report any recent seizures or injuries.

- You can eat and drink normally before the examination. If you have not eaten, for example, because of blood tests, feel free to have a snack before the examination.

### **Examination Process**

The examination does not cause pain and lasts for about an hour and a half. A friend or a relative can be present in the examination room, if necessary. The skin on your face and head is cleaned at the beginning of the examination. If you wear make-up, please prepare to have your make-up and face moisturiser removed from your forehead and around your eyes, where the measurement sensors are placed.

Small measurement sensors are placed on your face and head, on the surface of the skin. Water-soluble conductor paste is applied between the sensors and your skin. The sensors are attached to an EEG recorder. 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 take some deep breaths.

### **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 in turn inform you of the examination results and any possible follow-ups.