

Ion Channel ENMG and Preparation

Ion channel ENMG

(electroneuromyography) is an examination of the muscle membrane's ion channel function. Muscle responses are studied with electrodes attached to the skin and minor electrical impulses. If necessary, the muscle activity is registered with a thin needle. The examination usually takes 30 to 90 minutes.

Before the examination

You can take your medication as usual before the examination. You can also eat and drink normally.

If you received a symptom map, please mark your symptoms there before the examination. Bring copies of any previous ENMG reports with you to the examination.

For a successful examination, please:

- Wash yourself carefully at home. Do not apply any lotion on your skin.
- Dress warmly for the trip, so that also your hands and feet will stay warm.
- Wear briefs for underwear.

When you arrive to the examination, please inform us if you have:

- a blood coagulation disorder
- anticoagulants in use (e.g. Marevan)
- a pacemaker
- a blood-borne disease (e.g. hepatitis B, HIV)

During the examination

In the examination, we study how stressing and/or cooling affect the muscle's ability to contract. You will have at least a short stress test during the examination and potentially a long stress test, if necessary.

The short stress test consists of repeated 15-second muscle activations, after which we monitor your electrical muscle response for one minute. The test is done both with the muscle at normal temperature and after cooling it with a cold pack.

In the long stress test, the muscle is stressed for five minutes, after which the muscle response is monitored for at least 50 minutes.

Surface electrodes will be attached on your skin to monitor muscle response during the test. Needle electrodes may also be used to study muscle activity during the examination.

Generally, this examination does not cause any after-effects but passing hematoma in the puncture site, local pain, minor tissue damage, and – very rarely – an infection are possible. Some patients with chronic pain may experience transient increase in their pain intensity for about one day. However, this occurs only rarely.

After the examination

You will receive the results of the examination from the doctor who treats you. If you do not know how to find out the results, please contact the outpatient clinic or ward that referred you to this examination.

Other things to note

Please take your Kela-card or identification with you.

You will not be charged for the examination separately.

Cancel the appointment if you cannot come.

If you do not cancel, you will be charged a fine.

Symptom map

Date: _____

Name: _____

Social security number: _____

Height: _____

Please draw in the image the areas where you have had pain, numbness or loss of sensation during the past three months.

Pain = red

Numbness, tingling, stinging on skin = green

Loss of sensation = blue

Draw intense symptoms with darker colours.

Draw mild symptoms with lighter colours.



