

Paediatric Sleep EEG Examination and Preparations

The purpose of the sleep EEG (**electroencephalogram**) examination is to record the electrical activity of the brain both awake and asleep. Indications for the examination include seizure-type symptoms and developmental disorders.

The examination takes about two hours.

Before the examination

Wash and dry the hair before the examination. Do not use hair products such as gel, hairspray or oil.

Bring information about any medications with you to the examination. All prescribed medicines may be taken as instructed. Eating and drinking normally is allowed.

Falling asleep in an unfamiliar environment may be difficult, which is why the child must be sufficiently tired at the start of the examination. In addition to recording awake state, we seek to record about 10 minutes of sleep. After this, the child is woken up.

Parents: How to promote a successful examination of your child

- The child must be kept awake sufficiently prior to the examination to ensure that he/she is able to fall asleep during the examination. Estimate how long your child needs to

be kept awake beforehand, using the table at the end of these instructions as a guideline.

- Melatonin may be administered orally during the examination to help the child fall asleep.
- It is very important that the child does not fall asleep on your way to the examination.
- A familiar milk or juice bottle, breastfeeding, pacifier, toy or sleep music may calm an infant or toddler during the examination.

Only one person may accompany the child to the examination room. Arrange daycare for siblings for the duration of the examination.

Young individuals: How to promote a successful examination

- Stay awake as much as you need in order to be very tired when you come to the examination. If necessary, ask an adult to ensure that you manage to stay awake and get up early.
- Melatonin may be administered orally during the examination to help you fall asleep.
- Do not drink stimulating beverages, such as energy drinks, cola, coffee or tea before the examination.
- Keep in mind that your concentration will be diminished due to being tired also after the examination.

The examination

At the beginning of the examination, a flexible cap with electrodes is attached on the head of the patient. The electrodes are then treated with water-soluble gel.

The recording is done with the patient lying down on a bed. In addition to sleep, we record the patient's awake state both eyes closed and eyes open. Depending on age, a flashing light may also be used or the patient asked to breathe briskly for a few minutes.

After the examination

Some gel may remain in the hair after the examination, but it comes off easily by washing the hair normally at home. The electrodes may leave small, quickly passing impressions on the skin. The marks can be covered with a hat or scarf brought from home.

You will receive the results of the examination from the doctor treating your child.

If you do not know how to find out the results, please contact the outpatient clinic or ward that referred the child to this examination.

Other things to note

Bring the child's Kela card or other official document of identification with you.

There is no separate charge for the examination.

Cancel the appointment if you cannot come.

Watch a video on sleep EEG:

YouTube > [Lasten uni-EEG \(in Finnish\)](https://www.youtube.com/watch?v=oBufuWFpnao)
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Guideline for keeping children awake, based on age

The table shows how children and young individuals of various ages are kept awake prior to the sleep EEG.

Patient's age	Under 1 year	1 to 5 years	6 to 12 years	13 to 17 years
Schedule for staying awake	Keep the child awake for 3 hours before the examination.	Going to sleep: <ul style="list-style-type: none"> at normal bedtime Waking up: <ul style="list-style-type: none"> 2 hours earlier than normally 	Going to sleep: <ul style="list-style-type: none"> 2 hours later than normally Waking up: <ul style="list-style-type: none"> at 5 a.m. 	Going to sleep: <ul style="list-style-type: none"> 2 hours later than normally Waking up: <ul style="list-style-type: none"> at 4 a.m.