

Sleep deprived EEG

This leaflet is designed to give you some information about the investigation for which you have been referred. Your doctor may have already explained what a sleep deprived EEG involves, but you will probably still have some questions. You will usually have had a routine EEG before we ask you to do a sleep deprived EEG and so you will be familiar with the general procedure of the investigation.

If after reading this leaflet you have any fears, queries or concerns related to the recording, you will have the opportunity to discuss any of these issues on the day of the appointment with a healthcare professional prior to the start of the investigation.

WHAT IS A SLEEP DEPRIVED EEG?

An EEG is a routine investigation performed on all age groups of patients to help in the diagnosis of many disorders of the brain. An EEG records the electrical activity that your brain produces while sending and receiving messages to and from your body. You will probably have had already a routine EEG before. A sleep deprived EEG is very similar except you must stay awake the night before.

BEFORE THE INVESTIGATION

You must stay awake for as long as possible and ideally the entire night before your appointment. If you must sleep you can do so for a maximum of 4 hours between 2 am and 6 am only. Do not drink coffee, tea or other caffeine containing beverages during the night or in the morning of the appointment. The purpose of sleep deprivation is to increase the likelihood that we see some abnormal electrical activity of the brain which may not have been captured in a routine EEG recording.

Sleep deprivation may also lower the threshold for seizures. This may happen to anybody, even if you do not suffer from epilepsy. If you have any concerns regarding this risk of sleep deprivation and the benefit of the test you need to discuss this with the referring physician before you start the sleep deprivation. Please do not contact us, as we will not be able to advise you on this issue in your individual circumstances.

ON THE DAY OF THE INVESTIGATION

Please be on time and report to the reception. We advise that you bring somebody with you to escort you safely to the hospital and back home. You must not operate a car, motorcycle or bicycle during the night before your visit or on the day of the investigation. You should have a light breakfast (without coffee or tea) and take your medication as normal, unless otherwise directed by your doctor. Please bring a list of your medication with you. Your hair should be clean and free of hair lacquer, gel, oil or other substances when you attend.

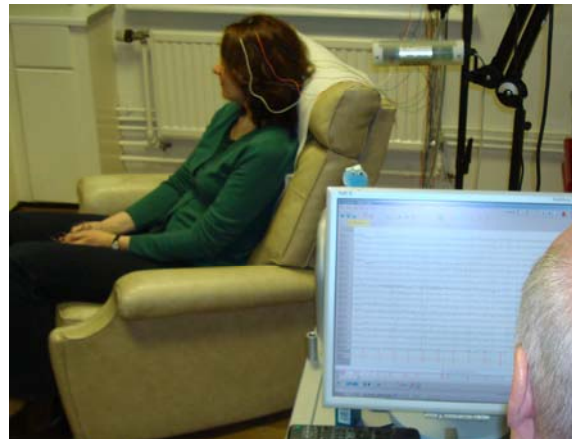
THE PROCEDURE OF THE INVESTIGATION

The investigation will be carried out by a clinical physiologist who will explain every step of the procedure and will take about 2 hours.

Throughout the investigation you will be seated in an armchair or lay in a bed. Using a sticky, water-soluble paste the clinical physiologist will place 22 small disposable discs onto your head. Because the discs are only used once they cannot transmit any diseases. To improve the contact the skin will be rubbed with some gritty paste beforehand. This preparation takes about 15 minutes

Please inform the clinical physiologist, if you have any allergies to latex or plaster tape before the procedure.

Once the discs are in place the brain activity will be recorded for approximately 45 to 60 minutes. During this time we will also obtain a video recording of yourself and we will ask you to give us your written consent for this. Throughout the test the clinical physiologist will give you simple instructions, such as opening and closing your eyes and it is likely that you will sleep during the EEG.



DEEP BREATHING (HYPERVENTILATION)

This is usually performed during an EEG, as it can produce changes in brain wave activity that help in the diagnosis. Deep breathing is not done:

- if there is a history of heart or chest disease
- in patients with epilepsy who have not had a seizure for more than 12 months.

OBSERVING FLASH LIGHTS (PHOTIC STIMULATION)

This is a routine procedure of the EEG as it can also produce changes in brain activity that help in the diagnosis. You will be asked to look at a bright light which flashes at different rates. Photic stimulation is not done:

- in patients with epileptic seizures that have only occurred at night for 3 or more years.
- in patients with epilepsy who have not had a seizure for more than 12 months.

There is small chance that deep breathing or flash lights can trigger a seizure in susceptible individuals. The clinical physiologist will discuss these parts of an EEG with you and neither will be performed, if you feel uncomfortable or concerned about them.

AFTER THE INVESTIGATION

When the investigation is finished, the discs are removed without any pain. You may be drowsy afterwards and it is probably a good idea to have somebody to escort you home. You should not drive for the rest of the day. There may be some small amount of paste left in your hair which will wash away with shampoo.

RESULTS OF THE INVESTIGATION

The results of the test will not immediately be available for you because the recordings need to be studied by a physician. He or she will write within a few days to your consultant who will then discuss the findings with you.