

Sleep Deprived Electroencephalography (SDEEG)

An EEG is a diagnostic test which records the natural electrical activity of the brain. Our brain cells communicate by producing tiny electrical impulses and the EEG recording is used to look for changes in this normal activity which can help with diagnosis and treatment of many disorders which involve the brain.

You will probably already have had a routine EEG. A SDEEG is very similar except you must stay awake some of the night before; this is because we would like to record your EEG during natural sleep.

How do I prepare for the test?

- You will need to go to bed later than usual and wake up early in the morning. In the morning, please remain awake until your appointment time.
 - What time you go to bed and wake up depends on how easily you think you will fall asleep during the test. As a guide, we recommend that you go to sleep at least 2 hours later and wake up 2 hours earlier than you do normally.
 - However, we do not apply this rigidly – if you feel you require more or less sleep in order to sleep during your appointment, please adjust the times.
 - **Please DO NOT drive yourself to the hospital for your appointment, or drive until you have had sufficient sleep. This is because lack of sleep can impair your concentration whilst driving.**
 - **If you are the parent of a child having this test and have stayed up with them, please DO NOT drive to the hospital for their appointment, or drive until you have had sufficient sleep (see above).**
- Please avoid drinks containing caffeine. These include tea, coffee, hot chocolate, cola and some energy drinks. You may drink water, fruit juice and milk drinks.
 - Medicines should be taken as usual, and eat meals as normal..
 - Please bring a list of medicines you may be on.

What happens during the test?

The SDEEG is performed by a qualified or trainee Healthcare Scientist and takes approximately 2 hours. Trainees are supervised by a qualified member of staff, the amount of supervision varies, depending on the amount of experience the trainee has. We will ask your permission if a trainee is performing the test.

For an SDEEG, about 23 small discs (electrodes) are placed on the scalp using a special sticky paste. This can feel a little scratchy.

The electrodes are connected by wires to a computer which records the changes in the electrical signals.

Once the electrodes have been attached you will be asked to lie down on a bed and the lights will be dimmed while the recording takes place.

You will be asked to open and close your eyes a few times before we let you rest and fall asleep.

The recording causes no discomfort as the electrodes only monitor the signals and do not produce any sensation (very much like an ECG).

Video recording

Where possible we like to record a video of your test alongside the SDEEG. The video helps us report your test more accurately as we can see any movements you made and if you have one of your typical episodes, we can see what happens.

You will be asked to sign a consent form for video recording. Often the video will be erased from our system after your test is reported; if there are useful sections of video we will keep them with your EEG for future reference.

Side-effects

If you are allergic or sensitive to cosmetics, lotions or sticky tape, please tell the Healthcare Scientist before the test starts.

Lack of sleep impairs concentration and reactions whilst driving.

The procedure is very safe, but lack of sleep can on rare occasions provoke a seizure (the words 'fit' and 'seizure' mean the same thing) in some people.

After your test, please make sure you have a sleep before resuming normal everyday activities, particularly those activities which may require concentration or decision making. If you are in doubt, it may be best to delay the activity until you have caught up on your sleep.

When will I get the results?

After completing the examination, the results will be analysed and a report will be sent to the doctor who referred you. This may take up to 3 weeks.

What are the consequences of not having the SDEEG?

An EEG is a well-established method of helping doctors to diagnose and treat a wide range of medical conditions. Your doctor would not have as complete a picture as required and hence your diagnosis may take longer and/or your treatment may not be the most appropriate.

Contacting Us

Staff in the department will be happy to answer any query you may have and will do their best to ensure your comfort.

Please let us know if you are unable to attend your appointment by ringing the telephone number below.

If you have any questions or concerns about the test please ring the **Neurophysiology Department** on **01392 402458**.

We welcome feedback about our service. Please tell a member of staff if you felt this service is good or otherwise

The Trust cannot accept any responsibility for the accuracy of the information given if the leaflet is not used by RD&E staff undertaking procedures at the RD&E hospitals.

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