

Having an EEG

This leaflet explains more about having an EEG, including the benefits and risks and what you can expect when you come to hospital. If you have any further questions, please speak to the clinical physiologist looking after you.

What is an EEG?

- An electroencephalogram (EEG) is a test to record the electrical activity produced by the brain. Recording this activity can provide doctors with useful information about how your brain is working. This helps to diagnose conditions that affect the brain.
- A video will be recorded of you as a patient during the test. We are able to record any movements or episodes which occur during the EEG. This helps us to understand the EEG recording.
- There are no alternative tests – the EEG is not a scan of the brain.

How can I prepare for the EEG?

- You should take your medication and have meals as normal.
- Please wash your hair but **do not** use hair gels, oils or other hair products.
- It is difficult to perform the test if you have a hair weave or extensions; please remove these before having the EEG.
- Please wear loose clothing for the test as extra sensors may need to be placed on your body – typically your shoulders.
- Do not drink any tea, coffee or energy drinks, for example Red Bull®, before your test.
- If you have children they should be accompanied by another adult or left at home/school.
- If you have been sent instructions to sleep deprive yourself, you should do this the night before the EEG.

Giving my consent (permission)

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the test and you understand what it involves. It is your right to have a copy of the form.

If at any time you are unhappy with anything regarding the test, please tell the physiologist. If you would like more information about our consent process, please speak to a member of staff caring for you.

What happens during the test?

A routine EEG can take up to 1 hour 30 minutes. A sleep EEG can take up to 2 hours. The EEG is performed by a clinical physiologist. They are trained in obtaining brain wave recordings. The recording is taken by attaching small metal disks to your scalp; these are called electrodes. They are connected to a recording computer. **It is a painless procedure.**

- To begin, the physiologist will mark measurements onto your scalp with a soft crayon. After rubbing the marks with a gel, each electrode is attached to the relevant point using a sticky paste (much like Vaseline®).
- A hair net will be placed over the wires.

Usually, you will be asked to move to the bed and be made comfortable; recording will then begin.

The test is split into three parts though you may not have to perform every part. Full explanations of each part will be given by the physiologist during the test.

Part 1 – Relaxation

You will be asked to close your eyes and relax. If you feel drowsy during this period you are encouraged to fall asleep. This period is extended during a sleep test in order to obtain a recording of your brain waves while you sleep.

Part 2 – Deep breathing

You may be asked to perform this 3 minute exercise dependent on your medical history. This exercise may produce short term changes in the electrical activity of the brain which can help in your diagnosis. The physiologist will instruct you how to breathe during this time. You may experience dizziness or tingling in your hands, feet or lips when performing this exercise – this is normal and will pass once you breathe normally again.

Part 3 – Flashing light

The physiologist, will ask you to look at a lamp which will flash at different speeds for short periods of time. This exercise can help in your diagnosis, particularly if you have seizures or blackouts caused by flashing lights.

What are the risks?

There are no known side effects as a result of having an EEG. There is a very small risk that parts 2 and 3 of the test could cause a seizure or blackout. If this occurs the exercise will be stopped immediately and you will be looked after in the department until you are well enough to go home.

What happens after the test?

- The electrodes will be removed from your scalp and your hair lightly cleaned to remove the paste. Some paste may remain in your hair making it feel sticky – this will wash out with normal shampoo.
- There are no side effects due to the test. You can resume normal activities immediately after the test.
- If you have had a sleep deprived test, you may still be very sleepy so we advise somebody to aid you to travel home.
- The test is analysed by the physiologist and consultant neurophysiologist; a full report will be written and sent to your referring consultant.
- You will receive the results from your referring consultant; **results are not available immediately after the test.**
- If you are not aware of a follow-up appointment with your referring consultant, you will need to contact them to arrange this.

Contact us

If you have any questions or concerns about the EEG, please call 0207 188 3953 Monday to Friday, 9am–5pm to talk to a physiologist.

You may also find the Epilepsy Action website useful: **www.epilepsy.org.uk**

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

t: 020 7188 8801 at St Thomas' **t:** 020 7188 8803 at Guy's **e:** pals@gstt.nhs.uk

Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

t: 020 7188 8815 **fax:** 020 7188 5953

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

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