

Electroencephalogram (EEG)

This leaflet explains more about EEG, including the benefits, risks and any alternatives and what you can expect when you come to hospital.

What is an EEG?

- An EEG records the electrical activity produced by the brain using small electrodes that are placed on the head.

Why should I have an EEG?

- Your consultant has requested this test as part of the investigation into your current complaints or conditions, such as blackouts and seizures.

What happens during an EEG?

- You will be met in the waiting room by one of the Clinical Physiologists and taken to a clinical room where the test will be explained and any questions answered. You will be asked about your medical history including details regarding your current complaint.
- Your head will be measured with a tape measure and pencil before 23 electrodes (small silver discs) will be placed on your head using a sticky paste. Two further electrodes will be placed on your shoulders to monitor your heart rate. Additional electrodes may be applied to monitor specific movements.
- During the recording you will be sitting quietly in a chair or lying down on a bed for around 20 minutes. The clinical physiologist will ask you to open and close your eyes. This is a painless procedure.
- You may be asked to complete a couple of exercises during this time:
 - *Deep Breathing (Hyperventilation)*. This involves taking fast, deep breaths for around three minutes. This may make you feel temporarily dizzy but the feeling should pass quickly once you have stopped the exercise.
 - *Photic Stimulation*. You will be shown flashing lights at various speeds with both eyes open and closed.
- A video recording will be taken during the EEG to allow movements and events to be analysed with the EEG. Written consent will be obtained during your appointment.
- The appointment will take around 60 minutes.

What are the risks?

- There is a small risk that you may experience one of your typical seizures or events during the test, particularly during the deep breathing and photic stimulation exercises.
- In the unlikely event that you have an epileptic seizure or blackout during the appointment you will need to inform the DVLA and your driving licence will be suspended.

Are there any alternatives?

- There are currently no alternatives to an EEG.

How can I prepare for an EEG?

- Continue to take your medication as normal prior to the investigation unless instructed by your doctor. You should also eat and drink as normal.
- Ensure hair is clean and free of any hair products including hairspray and gel. If you have hair extensions or weaves, these will need to be removed prior to your appointment.
- Please wear loose clothing as some additional electrodes may need to be placed on your body particularly on your shoulders.
- You should attend your appointment on your own unless you require an escort or interpreter.

Asking for your consent

- The procedure will be carefully explained to you at the start of the appointment and you will be given an opportunity to ask any questions. Verbal consent will be obtained before the procedure begins.
- Written consent will be obtained for the use of the video recording.

Will I feel any pain?

- An EEG is a painless procedure. However, people with head sensitivity may experience some discomfort during the set up and removal of the electrodes.

What happens after an EEG?

- Once the electrodes have been removed you will be able to go home or back to work as there are no side effects from the procedure. Your hair will feel sticky from the paste used during the test so this will need to be washed.

- The results will **not** be given to you during your appointment. These are usually sent to your referring doctor within two to three weeks.

Will I have a follow-up appointment?

- You may have a follow-up appointment with the referring doctor to receive your test results.

Useful sources of information

- If you require any further information please contact the Neurophysiology Department and ask to speak to one of the clinical team.
- The Epilepsy Action website has some useful information: <https://www.epilepsy.org.uk/>

Contact us

If you have any questions or concerns about EEG, please contact the Neurophysiology Department on 020 8725 4624 (Monday to Friday, 8.30am to 4.30pm).

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

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

Web: www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

Tel: 111

AccessAble

You can download accessibility guides for all of our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.

