

# Paediatric Electroencephalogram (EEG)

**This leaflet explains about EEG, including the benefits, risks and any alternatives and what you can expect when your child comes to hospital. If you have any further questions, please speak to a staff member caring for your child.**

## 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 my child have an EEG?

Your child's consultant has requested this test as part of the investigation into their current complaint or condition, 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 child's medical history including details regarding their current complaint.
- Your child's head will be measured with a tape measure and pencil before 23 electrodes (small silver discs) will be placed on their head using a sticky paste.  
Two further electrodes will be placed on their shoulders to monitor their heart rate. Additional electrodes may be applied to monitor specific movements.
- During the recording your child will be sitting on your lap, in a chair or lying down on a bed for around 20 minutes. The clinical

physiologist will try to obtain periods of eye closure during this time. This is a painless procedure.

- Your child 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 will often be done using a windmill. This may make your child feel temporarily dizzy but the feeling should pass quickly once they have stopped the exercise.
  - *Photic Stimulation*. Your child will be shown flashing lights at various speeds.
- 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 the appointment.
- The appointment will take around 60 minutes.

### **What are the risks?**

There is a small risk that your child may experience one of their typical seizures or events during the test, particularly during the deep breathing and photic stimulation exercises.

### **Are there any alternatives?**

There are currently no alternatives to an EEG.

### **How can I prepare my child for an EEG?**

- Continue to give your child's medication as normal prior to the investigation unless instructed by your doctor. Your child should also eat and drink as normal.
- There are some toys and books in the department. However, please bring anything from home that will keep your child entertained and settled during this appointment.

- Ensure hair is clean and free of any hair products including hairspray and gel. If your child has hair extensions or weaves, these will need to be removed prior to the appointment.
- Your child should wear loose clothing as some additional electrodes may need to be placed on your child particularly on their shoulders.
- Your child should be accompanied by **one** parent, guardian or carer.

### Asking for your consent

The procedure will be carefully explained to you both 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 my child feel any pain?

An EEG is a painless procedure. However, children 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 your child will be able to go home or back to school as there are no side effects from the procedure. Their hair will feel sticky from the paste used during the test so this will need to be washed.
- The results will **not** be available during your child's appointment. The results will be sent to the referring clinician.

## **Will my child have a follow-up appointment?**

You may have a follow-up appointment with your child's referring doctor to receive the 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: <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](http://www.stgeorges.nhs.uk)**

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## **Additional services**

### **Patient Advice and Liaison Service (PALS)**

PALS can offer you advice and information when you have comments or concerns about our services or care. You can contact the PALS team on the advisory telephone line Monday, Tuesday, Thursday and Friday from 2pm to 5pm.

A Walk-in service is available:

Monday, Tuesday and Thursday between 10am and 4pm

Friday between 10am and 2pm.

The Walk-in and Advisory telephone services are closed on Wednesdays.

Please contact PALS in advance to check if there are any changes to opening times.

PALS is based within the hospital in the ground floor main corridor between Grosvenor and Lanesborough wings.

**Tel:** 020 8725 2453 **Email:** [pals@stgeorges.nhs.uk](mailto:pals@stgeorges.nhs.uk)

### **NHS UK**

The NHS provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health. **Web:** [www.nhs.uk](http://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 our services by searching 'St George's Hospital' on the AccessAble website ([www.accessable.co.uk](http://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.

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