

Clinical Neurophysiology Department

Your child's Electroencephalogram test (EEG)

Information for parents and carers

This leaflet provides you with information about your child's EEG. We hope this leaflet answers any questions that you may have. This leaflet will not replace discussions between you and your child's care team, however it aims to help you understand more about what is discussed. If there is anything that you do not understand, please ask your child's physician.

What is an EEG?

An electroencephalogram (EEG) is a test that records the electrical activity of the brain. The nerve cells in the brain produce tiny electrical signals and these signals (also called brain waves) can be recorded via electrodes (small disks) placed on the scalp.

The EEG will provide useful information to help your doctor to diagnose and manage your child's complaint or condition.

The test is safe and painless. We can perform this test on people of all ages, including newborn babies.

On the day of the test

- The person bringing your child to the EEG should have 'Parental Responsibility' (i.e., have legal rights, responsibilities, duties, power and authority to make decisions for the child).
- Please ensure your child's hair is clean and free from hair products such as gel or hairspray.
- Your child can continue to take their medication as normal. Please bring a list of your child's current medication with you to the appointment.
- They can eat and drink as normal.
- Please bring toys or electronic devices to entertain and distract your child during the study. You may also bring a comforter.
- You may wish to bring a brush/comb to tidy their hair or a hat to cover their hair after the test.

During the test

- A routine EEG appointment will generally last between 60-90 minutes. If you are having a prolonged EEG this will take between one-and-a-half and two hours.
- You will be greeted at the department by the Clinical Scientist/Physiologist who will be performing your child's test.
- We will then explain the EEG in detail and you and your child will have the opportunity to ask questions. We will ask you some questions about your child's medical history, known family history, current clinical events/symptoms, and current medication.
- During the test, we will take a video recording to assist with our brain wave analysis. We also record a video so that, in the rare event that your child has one their typical symptoms or events during the test, this can be documented for the medical team. This will be explained to you in further detail at the appointment and we will ask for your consent to film.
- Your child can sit on your lap, in a chair, or lie down on the bed during set-up and the recording.
- Once the test has been explained and consent has been provided, electrodes will be applied to the head using a sticky paste. This can take a while and your child will need to stay fairly still during this time.
- A few additional electrodes may also be applied to the chest or shoulders to monitor the heart rate.
- We may ask your child to do a deep-breathing exercise for about three minutes. Depending on your child's age and cooperation, we may ask your child to blow into a paper windmill for this exercise. Your child may feel light-headed and or a tingling feeling in your lips or fingers-don't worry as this is normal and will pass when your child is breathing normally again.
- We may also ask your child to look at some flashing lights during the test. This is to monitor any brain wave changes in response to the light.
- Please note: Very rarely, the deep breathing or flashing lights can trigger abnormal brain waves or a seizure. This is not our aim and if this happens during the test, the exercise will be stopped immediately, and appropriate care given.

After the test

- After the test, we will remove the electrodes from your child's head and clean their hair to remove the paste. You will need to wash your child's hair when you get home to remove any excess gel and paste. Your child can go to school or nursery after the test.
- The results will not be available to you on the day because they need to be analysed.
- A full report will be sent to your child's referring consultant within one week. Your child may have a follow-up appointment already scheduled with their referring Consultant or you will need to arrange an appointment after the test. The consultant will explain your child's results at the follow-up appointment.

Are there any risks or complications?

- There are no common side effects to an EEG – the electrodes simply read the electrical activity in the brain. It is not painful or invasive.
- If, for any reason, we are unable to apply all the electrodes on the day, there will be an opportunity to re-attempt this when your child is asleep or using sedation.

Additional information

If your child has any additional needs we will likely have been notified by the medical team in advance, however please feel free to call us to discuss any concerns. Please also contact us if you have any further questions, see details below.

CBeebies “Get Well Soon Hospital” series has an episode about having an EEG – Series 2, Episode 5 at www.bbc.co.uk/iplayer/episode/b09204fx/get-well-soon-hospital-series-2-5-eeq - this may be useful to watch before the test if your child is of an appropriate age.

Contact us

If you are unable to attend your appointment or have any questions or concerns about your appointment please contact us on:

Clinical Neurophysiology Department, St Marys Hospital: 020 331 26628

We are open Monday to Friday 8am-4pm

How to find us:

All paediatric EEGs are performed at:

St. Marys Hospital: Level 1, Mary Stanford Building B (opposite the chapel)

Nearest train stations:

- Paddington Station: Approximately 4-5 minutes walk from the station
- Edgware Road station: 7-8 minutes walk from the station

Local buses: 7, 23, 27, 36, 205, 332, 436

Please arrive on time for the appointment. If you are running late, please call us otherwise we may have to cancel or reschedule the test.

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on

020 3313 0088 (Charing Cross, Hammersmith and Queen Charlotte's & Chelsea hospitals), or **020 3312 7777** (St Mary's and Western Eye hospitals). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street
London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: **020 3312 1337 / 1349**

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team:
imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

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