



**The Leeds  
Teaching Hospitals**  
NHS Trust

# Electroencephalogram (EEG)

Information for patients



Leeds Centre for  
Neurosciences

## What is a EEG?

An EEG is the recording of the electrical activity produced by the brain. It is not painful and has no after-effects. You will be able to drive after this procedure. The test is performed by a physiologist.

## Preparation for the test

- Please have something to eat prior to the appointment.
- Continue to take medications as prescribed.
- It is essential that we can get access to your scalp. Please avoid top knots, backcombing etc. Hair should be clean and dry. Please do not use any hair products i.e. gel or hairspray.
- If you have a weave or complex braids or have any doubts about your hair please call the department before your appointment as it may affect the test.
- Bring a list of current medications.
- The test can last up to one hour.

## How is it done?

The test involves attaching 23 electrodes to the surface of the head. The area beneath the electrodes is rubbed with a cotton bud and the electrodes are applied using a sticky paste. This takes approximately 10-15 minutes. Some minor skin irritation may occur. Please make the staff aware if you have a skin complaint or allergy. The electrodes are then connected to the EEG machine.

You will then be asked to relax in a chair whilst the EEG recording is made. A video recording is also made throughout the test. This allows the doctors to see what you are doing and it will record any symptoms you may have. Viewing the video as well as your electrical activity can help the doctors make a diagnosis. The video recording will form part of your confidential medical records.

A copy of the recording may be saved and made available to the medical staff involved in your care. If your video recording is not deemed to be helpful it will be erased, You may be asked to consent for the video to be used for teaching purposes.

The recording will take approximately 20 minutes. During this time the physiologist will ask you to sit as still as possible and follow instructions such as opening and closing your eyes

### **Some of the following may be required during the test:**

- **Deep breathing** (this may produce changes in the electrical activity, which can help with the diagnosis). You will be asked to take deep breaths for approximately three minutes. This can cause a feeling of light headedness and some slight tingling in the lips and fingertips. This is normal and will pass when you return to normal breathing.
- **Flashing lights.** You may be asked to watch a flashing light. This will flash at different speeds for short periods of time and will last for 2-3 minutes in total.

**This may, in rare circumstances, cause a seizure in some patients. However, the physiologist will be closely monitoring you throughout and will try to limit this occurring.**

Once the recording is finished the electrodes and paste are removed. You may wish to wash your hair when you get home.

## Test results

All results will be analysed by a consultant who specialises in neurophysiology. The report will not be available immediately but should reach your GP/Consultant within 7-14 days

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

- we need your child to have clean and dry hair with no extra products such as oil, gel, mousse or hair spray. This will help stick the electrodes on your child's head.
- 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.
- arrange for someone to look after your other children if possible. It is better if they could be looked after at home or by another adult if they come with you.
- it is important for your child to be quiet and relaxed during the test. Bring toys/anything that your child likes to create some familiarity and help to distract during appointment

## Some questions that your child might ask about an EEG

**Q: *Does it hurt?***

**A:** No, the test does not hurt. We will place small sticky disks on your hair. It may only feel a bit cold and sticky. You won't feel anything during the test apart from the wires on your head. You will feel the same after the recording as you did before it.

**Q: *Can it read my mind?***

**A:** No, your thoughts are private and cannot be discovered by this test.

**Q: *Will they give me a needle?***

**A:** No, we do not use any needles, only small metal disks which sits on your head.

**Q: *Will they give me an electric shock?***

**A:** No. The metal discs record electricity coming from your brain but you do not feel this.

## What if my child has special and complex needs?

- If your child has special needs or you think they may not be able to cooperate with the procedure you can contact our EEG staff to discuss your concerns and the best course of action.
- You can also discuss this with your child's doctor if you think more support is required. You can contact the Learning Disability Team for more support ([leedsth-tr.lautism@nhs.net](mailto:leedsth-tr.lautism@nhs.net)) so that they can help us preparing your child for the test.
- If your child has an Hospital Passport you can send it to us so we can make the necessary adjustments and help your child having the best hospital experience possible. See contact details and opening hours of the Neurophysiology department in this leaflet.

## Students and trainees

As we are a teaching hospital, on occasion you might be asked if you would agree to a trainee to perform the test under supervision. Saying no to this will not affect your child's treatment. It is entirely your decision.

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

**Further Information about EEG's is available from numerous organisations including**

**UK Epilepsy Helpline: 01494 601400**

**or visit [www.epilepsynse.org.uk](http://www.epilepsynse.org.uk)**

**Helpline (freephone): 080 8800 5050**

**or visit [www.epilepsy.org.uk](http://www.epilepsy.org.uk)**

If you have any queries or questions regarding the information in this leaflet, please contact the Neurophysiology Department on **0113 392 6855**

**Large print copies are available on request from the department on the number above.**



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