York and Scarborough Teaching Hospitals
NHS Foundation Trust

Information about your Child's EEG appointment (Electro-Encephalography)

Information for patients, relatives and carers

ⓘ For more information, please contact:

Clinical Neurophysiology

Telephone: 01904 725665

Department of Neurosciences

York Hospital, Wigginton Road, York, YO31 8HE

What is an EEG?

An Electro-encephalography (EEG) is a recording of the electrical activity of the brain in the form of a graph. It is not painful and there are no after effects.

An EEG gives accurate information on the brain wave activity at the time of recording. This gives your doctor important information to help in making a diagnosis and for advising on any treatment you may require. There are a number of alternative EEGs available such as sleep deprived EEG and ambulatory EEG. Each has its advantages and disadvantages and in your child's case, a doctor considers an EEG to be the investigation of choice in the first instance. If you have any questions about this decision then please contact the doctor who referred you for the EEG.

How do I prepare for the test?

1. You should allow your child to eat and drink as normal.
2. Their hair needs to be clean. Do not apply any hair products, such as gel, spray or mousse.
3. There is **no need for your child to stop taking any medication** unless you have been advised by their doctor.
4. Any accompanying children must be supervised by another adult in the waiting area.

What do I need to bring with me?

- A list of all the medications your child is taking and inhalers if they use them.
- If they are having seizures or episodes, please bring a description of what happens to them and the dates of the most recent ones.
- It would also be helpful if you are able to record your child's episodes on video or a mobile phone and bring this with you when you attend.
- It is a good idea to bring your child's favourite toy, book or electronic device, such as a tablet. You may also want to bring anything that may settle them, such as their usual feeds, juice, dummy or snacks.

What happens during the EEG?

You can stay with your child throughout the procedure.

The EEG involves measuring your child's head, then cleaning small areas on the scalp with gel, before attaching 25 small discs (electrodes) to the scalp using a special paste. Once this has been done they are asked to sit quietly whilst the recording is undertaken, for approximately 20 to 30 minutes.

The clinical physiologist will ask you some questions about your child's medical history, symptoms and any episodes they have had.

During the recording, depending on their age and co-operation, they may be asked to open and close their eyes, undertake a deep breathing exercise, (by blowing a toy windmill) and look at a flashing light. This is called photic stimulation.

In the case of young children, the setting up procedure will be the same as above. If they are too young to sit still, then they will be allowed to sit on your knee and play quietly with toys.

The equipment we use to record your child's EEG also takes a video of them at the same time, which aids interpretation.

What are the benefits of the deep breathing exercise?

Deep breathing may produce changes in the brain wave activity that could help in their diagnosis.

During the deep breathing, some children may experience a light-headed feeling which soon passes when they start to breathe normally again.

What are the benefits of photic stimulation?

This is to assess any brain wave changes in response to the light. This is an important part of the test for children whose seizures or blackouts may be caused by flashing lights. It could help in their diagnosis.

Are there any risks connected to the deep breathing or the phonic stimulation?

This may, very rarely, cause symptoms or a seizure in children that are sensitive to changes in their body / brain or to the flashing lights.

How long will the appointment last?

The appointment will last up to one hour in total.

What happens once the recording is finished?

When the recording is finished, the discs will be removed, and small traces of paste may be left in your child's hair. This will wash out with shampoo.

The EEG recording will be reviewed, and a report will be sent to your Consultant and GP.

There are no after effects and your child can continue with their usual activities after their appointment.

What do I do if I cannot attend for my appointment?

If you are unable to attend for this appointment please let us know as soon as possible so that we can offer it to another patient.

If you have any queries or concerns regarding the test, then please contact the department.

Please telephone us on 01904 725665 between 8.30am and 4pm Monday to Friday.

Would you like to comment on this leaflet?

Meeting the needs and preferences of patients and carers is at the centre of everything we do. We hope that you found this leaflet useful and informative. If you would like to comment on this leaflet please contact: Department of Clinical Neurophysiology, York Hospital, Wigginton Road, York YO31 8HE or telephone 01904 725667.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email yhs-tr.patientexperienceteam@nhs.net.

An answer phone is available out of hours.

Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website: www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/

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