

Having an EEG with PET

This leaflet explains about having an EEG with PET, including the benefits and risks and what you can expect. If you have any further questions, please speak to the clinical physiologist looking after your child. More information about the PET scan will be sent by the radiology team.

What is an EEG?

An electroencephalogram (EEG) is a test to record the electrical activity of your child's brain. The nerve cells in the brain produce tiny electrical signals. Recording and checking these can give doctors useful information about how your child's brain is working. EEGs can be used to diagnose and monitor seizures disorders, sleep disorders, movement disorders, development, and changes in behaviour. These are known as events.

Why is your child being referred for this test?

Your child may have had previous EEG tests. The purpose of this EEG is to monitor any seizures that might happen within 30 minutes of the tracer being injected. The tracer (there will be more information about this in the leaflet about the PET) is injected and will help the radiology team see if the results of the PET scan show the resting (without any seizures) brain.

What happens during the test?

You and your child will be escorted to the PET centre where a clinical physiologist (specialist in the electrical function of the brain) will prepare your child for the test. They will mark measurements on your child's head with a soft crayon. After gently rubbing a gel over the marks, the physiologist will attach small discs called electrodes using a special paste.

During the preparation, your child can sit on your lap, looking at books or playing with toys. You may wish to bring their favourite book, toy or comforter with you.

The electrodes are connected to the EEG computer. This picks up electrical signals from your child's brain and they are recorded as wavy lines. The EEG will be recorded for just over 30 minutes after the tracer has been injected.

We will make a video recording of your child while the EEG is taken. This helps us when we interpret the EEG. We can observe any changes, for example in breathing or movements, which may be associated with seizure activity on the recording. You will be asked to give your consent.

Will there be any pain or discomfort?

Apart from feeling the skin being rubbed by the preparation gel and the discs being pressed onto the head, the test should be pain-free.

How to prepare for the test?

Please have washed hair but **do not** use hair gels, oils or other hair products. Other preparations for the PET scan will be contained in information sent by the radiology team.

Consent – asking for your consent

We want to involve you in decisions about your child's care and treatment. You will be asked to confirm that you are happy for us to do the EEG. If you would like more information about our consent process, please speak to a member of staff caring for you.

What are the risks?

There are no known side effects of having an EEG.

What happens after the test?

The electrodes will be removed from the scalp and the hair lightly cleaned to remove the paste. Some paste may remain in the hair making it feel sticky, but this will wash out with normal shampoo.

The test is analysed by the physiologist and consultant neurophysiologist. A full report will be written and sent to your referring consultant and compared with results of the PET scan.

Results from the EEG are not available immediately after the test.

Useful sources of information

Epilepsy Action, [w: www.epilepsy.org.uk](http://www.epilepsy.org.uk)

Contact us

If you have any questions or concerns about the EEG, please contact, **t:** 020 7188 3953 Monday to Friday, 8:30am-4pm, to talk to a physiologist.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [w: www.evelinalondon.nhs.uk/leaflets](http://www.evelinalondon.nhs.uk/leaflets)

Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline.

t: 020 7188 3003, Monday to Friday, 10am-5pm **e:** letstalkmedicines@gstt.nhs.uk

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk
t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111 **w:** 111.nhs.uk

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