

Having an EEG with PET

This leaflet gives information about having an EEG with PET, including the benefits and risks and what you can expect. If you have any, 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 us useful information about how your child's brain is working. EEGs can be used to diagnose and monitor seizure disorders, sleep disorders, movement disorders, development, and changes in behaviour. These are known as events.

Why your child is being referred for this test

Your child might 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.

During the test

You and your child will go 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 (electrodes) using a special paste.

During the preparation, your child can sit on your lap, looking at books or playing with toys. You might want 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 might 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.

Preparing 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.

Asking for your permission (consent)

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

Risks of an EEG with PET

There are no known side effects of having an EEG.

After the test

The electrodes will be removed from the scalp and the hair lightly cleaned to remove the paste. Some paste might 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, [web](http://www.epilepsy.org.uk) www.epilepsy.org.uk

Contact us

If you have any questions or concerns about the EEG, please contact, [phone](tel:02071883953) 020 7188 3953 Monday to Friday, 8.30am to 4pm, to talk to a physiologist.

For more information on conditions, procedures, treatments and services offered at our hospitals, please visit [web](http://www.evelinalondon.nhs.uk/leaflets) 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, [phone](tel:02071883003) 020 7188 3003, Monday to Friday, 10am to 5pm [email](mailto:letstalkmedicines@gstt.nhs.uk) letstalkmedicines@gstt.nhs.uk

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS), [phone](tel:02071888801) 020 7188 8801 [email](mailto:pals@gstt.nhs.uk) pals@gstt.nhs.uk. To make a complaint contact the resolution department [phone](tel:02071883514) 020 7188 3514 [email](mailto:complaints2@gstt.nhs.uk) complaints2@gstt.nhs.uk

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