Sleep with melatonin EEG

This leaflet explains about sleep with melatonin EEG. If you have any further questions or concerns regarding the test or recording period, please do not hesitate to contact the department 020 7188 9209, Monday to Friday, 8.30am-5pm to discuss.

We look forward to welcoming you to the Evelina London Children’s Hospital Puffin Department (1st floor). We hope that you will find the information below useful.

As the test takes up to an hour, it is essential that you arrive in time for your appointment. If you arrive late, your appointment may have to be rescheduled.

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 provide doctors with 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 commonly known as events.

What is melatonin?
Melatonin is a natural substance (hormone and nutrient) produced by the body available in tablet or liquid form. It is short acting and encourages relaxation and natural sleep. You will be given the melatonin for your child when you arrive at the department and your child will need to take it just before the test. It is not a strong sleeping tablet and your child may not sleep. This is not a problem and we prefer to emphasise having a rest rather than having a sleep. You may wish to bring a drink or yogurt for your child to take the tablet.

The use of melatonin for children is an unlicensed use of the medicine. There are times when doctors advise patients to use a medicine in a way not specified by the manufacturer of the medicine. They do this because they think it may work well to treat a particular condition. The patient information leaflet, Unlicensed medicines – a guide for patients, has more information about medicines being used outside their license. Please ask the hospital pharmacist for a copy.

What are the benefits of an EEG with melatonin?
An EEG can help doctors to diagnose epilepsy or to find out more about the nature of your child’s blackouts / episodes / seizures. Recording the EEG during drowsiness and sleep can help with diagnosis. More than nine out of 10 children we see for EEG fall asleep with melatonin.

Are there any risks associated with EEG or melatonin?
There are no known risks or side-effects of having an EEG. Melatonin is generally considered to be safe and nothing other than sedation (feeling sleepy) has been reported.
Are there any alternatives?
There is no alternative test. If you do not want your child to have melatonin, you can deprive them of sleep. To do this, try putting them to bed two hours later the night before and waking them two hours earlier on the day of the EEG.

What happens during the test?
The test takes about one hour. A clinical physiologist (specialist in the electrical function of the brain) will prepare your child for the test. He or she will mark measurements on your child’s head with a soft crayon. After gently rubbing a gel over the marks, the physiologist will attach 22 small discs (electrodes) using a special adhesive. During this preparation your child can sit on your lap, looking at books or playing with toys. We have many in the department, or you may wish to bring your child’s favourite book, toy or comforter with you.

Your child will be made comfortable on the bed and covered with a blanket. You will be able to sit beside them and read a story, if you wish. They will be encouraged to close their eyes. The discs are connected to the EEG computer. This picks up electrical signals from your child’s brain and they are recorded as wavy lines.

During the test your child may:
- be asked to take deep breaths and blow a windmill. This may produce changes in the electrical activity of your child’s brain that could help in diagnosis.
- have a light flashed in front of them, with their eyes open and closed. This is called photic stimulation. It is an important part of the test for children who may have seizures or blackouts caused by flashing lights. This, very rarely, may cause a seizure if your child is one of the few people that are very sensitive to flashing lights. If this appears to be the case, the light will be stopped.

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

Will my child feel any pain or discomfort?
Your child will feel their skin being rubbed and the discs being pressed onto their head, but the test should be painless.

What happens if my child has a seizure during the test?
It is unlikely that having the test will make them have a seizure. If a seizure occurs, care will be provided in the department until your child is well enough to leave.

Consent - asking for your consent
We want to involve you in decisions about your child’s care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree for your child to have the treatment and you understand what it involves. If you would like more information about our consent process, please speak to a member of staff caring for you.
What happens after the test?
The discs are removed and your child will be able to return home or to school. The sleep-
inducing effects of melatonin do not last very long. Small pieces of sticky paste may be left in
your child’s hair - these will wash out with shampoo.

When will we get the results?
The results of the test need to be analysed and a full report will be sent to the doctor who asked
for the test within one week. The doctor should arrange with you when and how you will receive
the results.

Is there anything we need to do to prepare?
You should continue to give your child any medicines they take regularly. Please wash your
child’s hair the night before or on the day of arrival and do not use any hair products such as
gels, oil, wax or sprays. This will help stick the electrodes to your child’s head.

It is important for the child, who is having the test, to be quiet and relaxed. If possible try to
avoid them falling asleep on the way to hospital. If you have other children it is best if they can
be looked after at home or by another adult if they come with you.

You can find out more by watching our two films on Evelina London’s website about having
an EEG in hospital and at home.
Contact us
If you have any questions or concerns about please contact the department on t: 020 7188 9209, Monday to Friday, 8.30am-5pm.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit w: 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.

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.

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch.

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.

NHS website
Online information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing.

Get involved and have your say: become a member of the Trust
Members of Guy’s and St Thomas’ NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, please get in touch.

Was this leaflet useful?
We want to make sure the information you receive is helpful to you. If you have any comments about this leaflet, we would be happy to hear from you, fill in our simple online form, w: www.guysandstthomas.nhs.uk/leaflets, or e: patientinformationteam@gstt.nhs.uk

Our values: Put patients first | Take pride in what we do | Respect others | Strive to be the best | Act with integrity