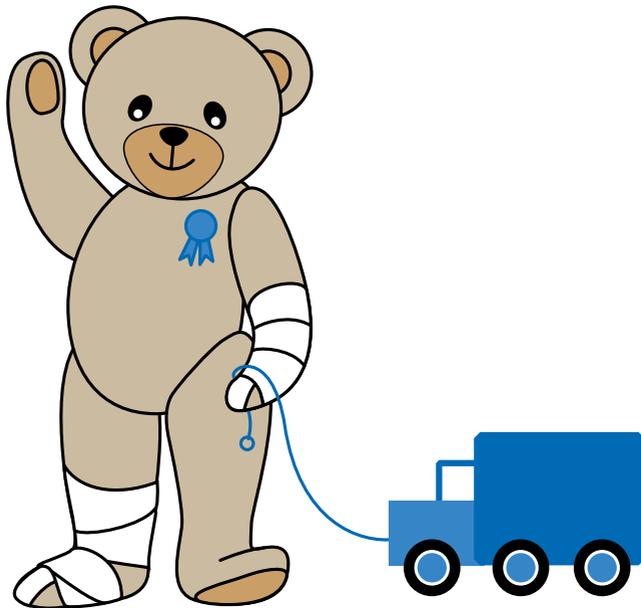


Melatonin EEG (Electroencephalogram) on a child

Neurophysiology Department



Patient information leaflet

This leaflet aims to provide information for parents or carers who are asked to bring a child to the Royal Surrey County Hospital for a melatonin EEG test. It describes what happens before, during and after the test, together with an explanation of any risks. You may wish to discuss the details with your child or let them read the leaflet themselves, as appropriate.

What is a Melatonin EEG?

If you receive an appointment for your child to have a melatonin EEG he/she will have probably already had a routine EEG. The referring doctor will have discussed the need for the test with you beforehand. The test will be carried out in a similar manner, but your child will need to take melatonin to help them fall asleep.

Melatonin is a naturally produced hormone. It helps us to regulate our body clock and get to sleep at the appropriate time. We use a man-made formulation of melatonin to help your child get to sleep during their EEG. Children aged one to five years old will need a 4 mg dose. Children age 6 years and above will need an 8 mg dose.

A video recording will be taken at the same time as the EEG. This is done so that any movements and/or behaviour noted during the recording can be linked to the brain activity seen on the computer. For more information, please refer to the attached video consent form.

Why is my child having this test?

The melatonin EEG test may help the doctor or consultant who referred your child in reaching a diagnosis. Useful information can show up in the recording during drowsiness and sleep.

What should I do before the test?

On the day of the appointment you will need to collect the melatonin from the hospital pharmacy. They will already have your child's prescription. Please ensure you check the label carefully and ask the pharmacist if you have any questions. You should allow 30 minutes prior to the appointment time in case of any delays at pharmacy.

Please bring the melatonin to the Neurophysiology department.

The Clinical Physiologist carrying out the test will tell you when to give your child the melatonin. It is your responsibility as parent/carer to give the melatonin. Please ask if you need any advice.

The melatonin is usually dispensed as a tablet. If your child is unable to swallow tablets, please bring a yoghurt and spoon or some fruit juice. The tablet can be crushed and mixed into the yoghurt or juice, to make it easier to swallow.

In addition please note the following:-

- Please ensure that your child's hair is clean and free from gel/lacquer when attending for the test.
- If your child has head lice, please ensure treatment has been successfully completed before the test.
- Your child should take any medication as normal unless otherwise directed by your doctor. It would be helpful if you would bring a list of any medication your child is taking.
- Your child may eat and drink as normal, but should not be given caffeine-containing drinks prior to the test.

What does the test involve?

After the melatonin has been swallowed it takes around 15–30 minutes to start to work. It induces a feeling of sleepiness. It does not sedate your child, nor does it cause them to be unrousable or unresponsive.

As with the routine EEG, the test will be carried out by a Clinical Physiologist who will explain the procedure and take some details of your child's medical history. These details will be passed on to the Neurophysiologist (specialist doctor) who interprets and reports on the EEG after you have left the department.

The electrodes will be applied to your child's head as before. He/she will then be asked to lie down and close their eyes to encourage sleep. You can of course stay with your child during the test.

The recording will take approximately 30 minutes, but may take longer if your child does not sleep easily. We can help by making the room dark and quiet, and your child will be kept warm by a sheet or blanket.

Does the procedure hurt?

EEG is a painless procedure.

How long will the test last?

Your child's appointment will last approximately 2 hours in total.

What else may be involved?

As with the routine EEG, your child may be asked to perform the activation procedures (the deep breathing and the flashing lights). Both these procedures are very useful for obtaining further information that does not show up when your child is simply resting. You may choose for your child not to have these carried out, in which case the rest of the test will be carried out as normal.

Are there any risks or side effects?

The EEG recording is a harmless and painless procedure. The electrodes pick up electrical activity from the brain but don't give out electrical signals so they don't affect the brain or cause any pain.

When taken at the correct dose, melatonin has very little risk of side effects. Children usually wake quite quickly from melatonin induced sleep. The medicine is generally well tolerated with no serious side effects.

The activation procedures mentioned above carry a small risk of producing a seizure in people who are prone to seizures.

There are no other serious risks or side effects.

Are there any alternatives?

Melatonin is one way of achieving sleep for this diagnostic test. Alternatively your child could be sleep deprived which means staying awake at night. If you don't want your child to have the test, you would need to discuss your options with your referring doctor.

What happens after the test?

Once the EEG has been completed and your child is awake you will then be free to go home. Your child may feel tired for a few hours following the test and you can allow them to sleep normally should they wish to.

You will **not** get the results of the test on the same day. The EEG will be analysed by the Clinical Physiologist, and reported by the Consultant Neurophysiologist. The EEG report will then be sent to the doctor or consultant who referred your child. They should receive this within 2 weeks.

If you have any further questions, please contact the Neurophysiology department on 01483 464128.

Further information about EEG testing is available from many organisations including:

UK Epilepsy Helpline

Freephone: 0808 800 5050

Website: www.epilepsy.org.uk

Email: helpline@epilepsy.org.uk

Txt msg: 07537 410044

Twitter: @epilepsyadvice

Reference sources

- BSCN/ANS – Guidelines for use of Melatonin to induce sleep for Paediatric EEG
CP June 2015 V1.2
- ANS Audit – 2014
Melatonin, Sleep & EEG
- BSCN – British Society of Clinical Neurophysiology
ANS – Association of Neurophysiological Scientists

Contact details

Neurophysiology Department

Telephone: 01483 464128

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757

Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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