

# Recording brain activity with melatonin (melatonin EEG) (children)

## Clinical Neurophysiology

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Information for Children

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Your child's consultant has asked us to do an EEG (Electroencephalogram) with melatonin. This sheet tells you what a melatonin EEG is. It will tell you what you need to know before you come for the appointment.

### What is a melatonin EEG?

Melatonin is a natural hormone made in the brain. This helps us go to sleep.

We record the electrical activity of the brain after your child has been given melatonin.

It may help to settle your child in an unfamiliar place or to help your child go to sleep.

A trained professional in healthcare science (physiologist) will carry out this melatonin EEG.

### What will my child need to do before the melatonin EEG?

- Your child's hair must be freshly washed. Do not use any styling products.
- Please bring a list of current medication and take these as normal.
- Your child may eat and drink as normal. They should not eat or drink anything that has caffeine like fizzy drinks and chocolate.
- Please dress your child in comfortable clothing that they would be happy to sleep in.
- It is best not to bring other children as it may cause disruptions to the test.
- **Please contact us if you have any questions or concerns before the appointment.**

**Health information and support is available at [www.nhs.uk](http://www.nhs.uk)  
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## How is the melatonin given?

Your consultant will give you a prescription for the melatonin at the outpatient clinic appointment.

You must take this to the hospital pharmacy.

A pharmacist will give you the dose of melatonin to take home with you. Keep it in a safe place until the day of the melatonin EEG.

Your child will take the melatonin by mouth. You may wish to bring a drink for your child to have when they take it.

**You must bring the melatonin with you on the day of the appointment.**

**Do not give your child the dose of melatonin before we take you in for the appointment.**

The physiologist will tell you when to give the melatonin. It takes about 20 minutes for the melatonin to work.

## What will happen during the melatonin EEG?

1. The physiologist may measure your child's head. They make some small marks on the scalp with a wax type crayon.
2. They will then prepare the skin at these marks with a gritty gel.
3. They will attach the electrodes to the scalp with a sticky paste. The recording electrodes are small metal discs. There will be up to 25 in total. We may also attach 2 electrodes to record the heart rate.
4. The physiologist will stay in the room with you during the test. They will ask questions about your child's medical history.
5. During the recording your child should relax as much as possible. They must follow any instructions given, for example, to open and close the eyes. We may ask them to do a deep breathing exercise for a few minutes. Rarely, this may cause a seizure or clinical episode.
6. The physiologist may show a series of flashing lights. This is to see if this affects the brain activity. Rarely, the flashing light may cause a seizure or clinical episode in people who are sensitive.
7. If a seizure or clinical episode does happen, we will take care of your child. We will make sure that you are safe to leave the department.
8. With your consent, we will make a digital video recording. This lets us compare movements and behaviour with the recorded brain activity (EEG).
9. At the end of the recording, we will wake your child. We will remove the electrodes. Any sticky paste left on the head can be removed when you wash the hair. This will not hurt.

The effect of the melatonin may last between 2 and 4 hours. Your child may still be sleepy when you return home.

The Melatonin EEG is **not** painful. There are no harmful after effects.



## How long will the Melatonin EEG take?

This depends on how your child responds to the melatonin. It will take around 2 to 3 hours.

## When will I get the results?

You will not get the results on the day.

We will send the consultant a report. They will then talk with you about the results.

## Anything else I need to know?

Please let us know if you will be arriving by ambulance, we may need to rearrange the appointment.

## Contact details

If you need more information before you come for the appointment, please call the Neurophysiology Department on **0116 258 5621**

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