

Melatonin sleep electroencephalogram (EEG)

Information for patients, parents and guardians

What is an EEG?

An EEG records the electrical patterns of the brain (brainwaves).

EEGs can be used to help diagnose and manage a number of different conditions (sometimes called events) including seizures/epilepsy, sleep disorders, movement disorders, as well as development and changes in behaviour.

The test will be carried out by specially trained health professionals called physiologists in the clinical neurophysiology department. The test will take up to one and a half hours to complete.

You will be able to stay with your child at all times.

What is melatonin?

Melatonin is a natural substance (hormone and nutrient) produced by the body. It encourages relaxation and natural sleep.

Your child will be given some medicine containing melatonin. It comes in the form of a small tablet, which can be crushed and mixed with liquid to make it easier to swallow. You can administer it, if you and your child prefer.

What are the benefits of an EEG with melatonin?

An EEG can help doctors find out more about your child's events. Recording the EEG while your child is drowsy or asleep can help with the diagnosis and improve the test results.

Preparing for the test

On the day of the test, your child can eat and drink as normal (but they should not consume anything containing caffeine such as cola, chocolate or tea).

They should take their regular medications as normal.

Make sure their hair is clean, dry and free from head lice (if required, please treat the hair at least 48 hours before the test).

It is important for your child to be relaxed. If possible try to avoid them falling to sleep on the way to the hospital though, as this may make it harder to fall asleep during the test.

Only patients are allowed in the test room. If you have other children, please make arrangements for someone else to care for them. If you need to bring other children with you, another adult will need to supervise them during the test.

What to bring with you

- A drink and a snack for your child to eat (can be eaten during the set up of the test not during the recording).
- If you are breastfeeding your child, you can do this before or during the test if you wish.
- A favourite toy or special comforter to help your child feel more relaxed.
- A brush or comb to tidy your child's hair after the test.

What happens during the test?

When you arrive at the department we will explain the process and ask you some questions.

Your child's head will be measured using a tape measure and a wax crayon used to mark where the 25 electrodes (small silver discs) will be placed. These will be held in place with a special sticky paste.

During this preparation your child can sit on your lap and play with toys. We have lots in the department, or you may wish to bring your child's favourite book, toy or comforter with you. (Your child needs to be relaxed for the test, so toys that are not too stimulating or loud are best).

Your child will be made comfortable on the bed and covered with a blanket, and encouraged to close their eyes. You will be able to sit beside them. A video recording of the EEG test will be made at the same time.

At some point during the test we may ask your child to watch a flashing light and to blow on a windmill toy in order to hyperventilate (breathe fast and deeply). These exercises are 'activation procedures' meaning they can change your child's brainwaves and help give the doctors more information.

You will be asked to give your consent to these exercises before the test starts. This is to confirm you understand there is a very small risk (less than 1%) of the activation procedures causing your child to have a seizure. You may decline this part of the test if you wish.

After the recording the electrodes will be removed and the sticky paste cleaned off with warm soapy water. You will need to wash your child's hair at home to remove the paste fully.

When will we get the results?

You will not receive any results on the day, as they will need to be analysed and shown to one of our consultants before being sent to the doctor who referred you for the test.

Further information

Please note that we see both children and adults in the neurophysiology department and there is a shared waiting room.

Please feel free to contact us if there is anything here that you do not understand.

If the appointment is not convenient please phone as soon as possible to rearrange it.

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Wessex Neurological Centre
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Telephone: **023 8120 6785** (from 8am to 4.30pm, or please leave a message on the answer machine)

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