Sleep EEG (Electro-encephalogram) with SEDATION- CHILD

What is an EEG examination?

A sleep EEG (electro-encephalogram) is the recording of electrical activity produced by the brain whilst you sleep. It will help your doctor in making a diagnosis. A sleep EEG is useful as it obtains different information to the routine EEG, as brainwave patterns change during sleep. Occasionally medication is given to assist your child in falling asleep, this medication is called Melatonin and will be prescribed by the doctor who has referred for the test.

Please bring this medication to the department. **Please DO NOT give your child the medication whilst you are at home.** The physiologist will arrange for your child to take the medication on arrival in the department

The appointment takes approximately two and a half hours, and the results will be sent to the referring GP/clinician usually within 2 weeks.

How is the test performed?

The appointment will take approximately two and a half hours. The physiologist will measure your child's head. A minimum of 23 leads are then attached to the scalp, next to the eyes, on the shoulders and under the chin using a sticky paste. Once the leads are in place, a bandage will be wrapped around your child's head to secure the discs. It will take approximately 20-25 minutes to attach all the leads. Your child will not feel anything whilst the EEG is being recorded. A digital video recording will be made during the test to enable the doctor to compare your child's brainwaves with his/her movements and behaviour at the time. The recording takes up to 60 minutes. However, the test can be performed without the video if you prefer. We will ask for your permission to use the video at the beginning of the test.

The lights will be dimmed, and your child will asked to lie down on a bed. Very young children will be able to stay on the knee of a parent.

We will need to obtain verbal consent for these procedures, and this can only be given by a person with parental responsibility. If you are unsure whether the person bringing your child can give consent, please check with the doctor who has referred your child or call the department on 01422 222976 for advice.

How do I prepare for the test?

Your child needs to be sleepy for the test, so we ask that the night before the test your child only has **HALF THE USUAL AMOUNT OF SLEEP.** For example, if he/she normally sleeps for 12 hours, this should be reduced to 6 hours sleep if possible. This is probably best achieved by keeping to the normal bedtime and getting your child up early, so he/she has been awake for a number of hours before the appointment.

Please ensure your child's hair is clean and free from hairspray and oils, and they are wearing loose fitting, comfortable clothing.

If your child is taking any medication, please continue to take it as normal and bring a list of medications with you. They may continue to eat meals as normal, and it might be helpful if they eat a good meal prior to the test.

If your child likes a drink of milk or a dummy when going to sleep, please bring these with you. It would also be helpful to bring along any other items you think might encourage your child to sleep, such as a special blanket, cuddly toy or perhaps a favourite nighttime story book.

It is very important that you try to keep your child awake on your way to the hospital.

It is helpful, where possible, to attend with someone who has witnessed any seizures or clinical events under investigation to gain a good description of them.

Please **do not** allow your child to have drinks that contain caffeine, e.g. coffee, tea and cola, or stimulant drinks on the day of their test.

Should you have any questions regarding melatonin please contact the prescriber, if you have any questions surrounding the test itself, please contact the Neurophysiology Department and ask to speak with a neurophysiologist.

Are there any risks?

For some people sleep deprivation can increase the possibility of you having an attack. If you have any questions regarding sleep deprivation, please contact the department and request a conversation with a physiologist.

Melatonin is a naturally occurring hormone which is produced inside the brain. It is produced at night-time to prepare the body for sleep. You have been given a manmade version of this hormone which is generally well tolerated and at such a low dose side effects are extremely unlikely.

The effect of Melatonin usually lasts for about 2-4 hours, but occasionally you may be drowsy for longer.

Following the test, do not leave your child unattended in the bath as they may still be drowsy.