

# Paediatric Video Telemetry

**This leaflet explains more about video telemetry, including the benefits, risks and any alternatives and what to expect when your child comes to St George's Hospital to have this procedure.**

**If you have any further questions, please speak to a doctor or nurse caring for your child.**

## What is video telemetry?

Telemetry monitoring is a test that looks at the function of the brain. It uses an electroencephalogram (EEG), which records your child's brain's normal electrical signals (brainwaves) through the scalp and which can be monitored for up to five days. A digital video recording will be made at the same time. This enables the doctors to compare your child's brainwaves with their movement and/or behaviour.

## Why should my child have video telemetry?

Telemetry monitoring may be used to: help in the diagnosis of recurrent attacks; monitor the frequency of seizures; record a complete night's sleep recording; or record seizures in children who may be candidates for epilepsy surgery.

## What are the risks?

Video telemetry monitoring does not have any specific risks when we are monitoring your child's usual brainwave activity.

In some circumstances the consultant will advise a reduction of your child's anti-epilepsy medication during the test. This should have been discussed with you in clinic but the reason will be to increase the likelihood of capturing seizures during the recording. This is necessary for patients considering epilepsy surgery, though whether your child's medication is reduced or not depends on how often they are having seizures.

If medication is reduced, there is a risk that seizures will be longer or more intense than usual. While the purpose of the test is to capture seizures and other attacks, the doctors and nurses will closely monitor the number and type of seizures your child has and will reinstate their usual treatment immediately if needed.

## Are there any alternatives?

Your child may have had a routine EEG or a Sleep EEG. This is an opportunity to perform a prolonged EEG recording which can monitor the frequency of seizures and record a complete night's sleep recording. Video telemetry can provide your consultant with additional information. If your child does not have this procedure, information regarding seizure type, frequency of seizures and in some cases, suitability for epilepsy surgery may not be available to the consultant.

## What happens before the test?

Telemetry monitoring is carried out on Nicholls Ward. You will be allocated a bed in a bay of four with a dedicated Health Care Assistant assigned to your child. The other patients in the bay

can be any age up to 18 years of age, and can be either male or female.

A fully accessible bathroom and toilet are located a short distance from your bay along the corridor. It is not possible for your child to bathe or shower during the monitoring period but washing by the sink is allowed as long as the equipment does not get wet.

As your child will be connected to a computer via a cable, the area your child will be able to move around in will be limited. You may wish to bring in laptops, DVD players, books and games to pass the time during your child's admission. The Ward Play Specialist will also be able to provide things for your child to do during their stay. TV is available free of charge between the hours of 7am - 7pm, with Wi-Fi freely available on the ward.

Please make sure that your child's hair is clean before the test, with no mousse, gel, oil or hairspray.

You should bring all regular medication(s) to the ward. Medication should be taken as usual unless this has been discussed with the doctor looking after your child prior to admission. The medication may be changed or adjusted during your child's stay but this will be discussed with you by the medical team. The nurses will often take your child's medication and lock it away safely. It will then be prescribed on a drug chart and the nurses will administer the medication. Your child's medication will be returned to you prior to discharge.

You will be able to change your child's clothes during the test but please select loose clothing that can button or zip at the front as you will not be able to remove clothes over your child's head.

## **Are there any special requirements?**

Please inform the ward in advance if you have any special requirements that could help improve your child's stay. During the admission we aim to make sure your child is safe from any injury that might occur during a seizure, for example there may be padding on the cot sides or bed to protect your child from hurting themselves during a seizure.

## **Asking for your consent**

It is important that you feel involved in decisions about your child's care. The Clinical Physiologist will explain the test and you will be asked to sign a consent form to say that you agree to have the video recording and understand what it involves. A copy of the signed consent form will be given to you for you to keep.

If it is planned to reduce your child's anti-epilepsy medication during their stay this will be discussed with you and consent will be obtained by your doctor in clinic or by the ward doctor.

You can withdraw your consent at any time, even if you have said 'yes' previously. If you would like more details about our consent process, please ask for a copy of our policy.

## **What does the test involve?**

The Clinical Physiologist will attach small silver discs (electrodes) to certain points on your child's head using special glue. The Clinical Physiologist will measure the head and mark the points with a soft pencil before attaching the electrodes. As each electrode is attached, he or she will clean

the area with a cotton bud and some cream. The electrodes are attached by wires to a small box (head box) and then to the recording machine. The clinical physiologist will record your child's brainwaves on a computer and monitor them on a screen.

The length of your child's stay on Nicholls Ward will be confirmed prior to admission. This is usually 48 hours (Monday to Wednesday or Wednesday to Friday) or 96 hours (Monday to Friday). The doctors may need to reduce or stop your child's anti-epilepsy medication for the test, but they will discuss this with you in more detail before the test.

A video camera on the ceiling above your child's bed will record seizures or other events during the test. Your child can move around as long as they stay in range of the camera. You will also be asked to make a note of any symptoms or seizures your child has on a diary sheet which the physiologists will give you.

If you are aware your child has had an attack you must press the alarm button so that we know an event is taking place. It is also helpful if you can describe aloud what is happening to your child during the episode.

Your child will be able to eat and drink as normal during the test. We will provide food and drink for your child throughout their stay, but please inform the staff on arrival if your child has any food allergies, so that their dietary needs can be met.

## **Will my child feel any pain?**

Children may find the attachment and removal of the small silver discs (electrodes) uncomfortable.

## **What happens after the test?**

The clinical physiologist will remove the small discs from your child's scalp. Some children may find this uncomfortable. A liquid is applied to the glue to soften it before the discs are removed. You will be advised during your admission how best to remove any residual glue in your child's hair. Their hair may feel sticky until you wash it.

If your child's anti-epilepsy medication has been reduced, your child may be given an extra 'top up' dose of medication before continuing on your usual treatment. This will be explained to you by the doctors and/or nurses prior to you going home.

## **What do we need to do after my child goes home?**

Your child can resume normal activities upon arrival home. If your child is being treated with medication, please continue with their usual medication.

## **How long until we get the results?**

You will not be given the results during your child's stay. The results from the video telemetry will be sent to the referring consultant. Your consultant may send you a letter outlining the main findings of the result and/or these will be discussed with you at the next Out-Patient appointment.

## **Reference Sources**

Patient Information Leaflets/ Websites:

Manchester Royal Infirmary / Manchester Children's Hospital, Manchester  
Great Ormond Street Hospital, London. King's College Hospital, London

## Contact us

### Patient Pathway Coordinator (Neurology) 020 8725 1796

Prior to admission, the patient pathway coordinator will be in regular contact.

Unfortunately, there are unforeseen circumstances where admissions are cancelled at short notice. In these rare situations, the Patient Pathway Coordinator will be in touch to arrange another mutually convenient date for your child to have video telemetry.

### Nicholls Ward 020 8725 2098/ 2099

Location: 5th Floor, Lanesborough Wing, St George's Hospital, Blackshaw Road, Tooting, London, SW17 0QT.

If you are running late or cannot make it in to hospital for your test, please contact the ward as soon as you can. The staff on Nicholls ward cannot alter your appointment and cannot give advice over the phone about the investigation. For any questions about your appointment please contact the patient pathway co-ordinator (above).

**Neurophysiology department:** 020 8725 4624

## Main points to remember

- Please let us know before admission if your child has any special requirements.
- Please bring all your child's regular medications to the ward.
- Please give your child their medication as usual unless this has been discussed with you by their consultant.
- Please make sure your child's hair is clean with no products such as gel or mousse.
- Please bring things to keep your child entertained during their stay.
- Please choose clothing for your child which fastens at the front with a zip or buttons as it will be difficult to remove clothing over your child's head.

## Disclaimer

Please note this is a generic St George's Hospital information sheet. If you have specific questions about how this relates to you, please ask your doctor. Please note this information may not necessarily reflect treatment at other hospitals.

**For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.stgeorges.nhs.uk](http://www.stgeorges.nhs.uk)**

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## Additional services

### Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough Wing (near the lift foyer).

**Tel:** 020 8725 2453 **Email:** [pals@stgeorges.nhs.uk](mailto:pals@stgeorges.nhs.uk)

### NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

**Web:** [www.nhs.uk](http://www.nhs.uk)

## NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

**Tel:** 111



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