This information booklet explains about video telemetry EEG monitoring and what to expect when your child comes to the Royal Manchester Children’s Hospital.

What is video telemetry monitoring?
Your child has probably had a routine electroencephalograph (EEG). Video telemetry EEG monitoring is similar to an EEG test in that it records the brainwaves but over a much longer period of time, sometimes taking up to five days to get the information needed. Your child will be admitted to hospital and will remain in hospital during this time.

If your child is due to have a reduction in their anti-epilepsy medication prior to the test they will be admitted 1 or 2 days before monitoring begins.

At the same time the brainwaves are being recorded, a digital video recording will be also be made. This enables the doctors to gain a clearer understanding of your child’s attacks.

Video telemetry EEG monitoring is requested for a variety of reasons.

Here are some examples of why your child may have been referred for video telemetry EEG monitoring:

- It is not clear what type of epileptic attacks they are having.
- The anti-epilepsy medication isn’t working well.
- There is a possibility their attacks are not being caused by epilepsy.
- Epilepsy surgery is being considered.

Where will the test be carried out?
Video telemetry EEG monitoring is carried out on Ward 78 in the Royal Manchester Children’s Hospital in a dedicated telemetry cubicle with attached bathroom facilities.
How long will my child be in hospital for?
For a period of 1 to 7 days.

Hair
It is helpful if you could make sure that your child’s hair is clean before the test, with no mousse, gel, oil or hairspray.

Medicines
If your child is taking any medicines they should continue to take them as normal, unless specifically instructed otherwise.

Change of clothes
During video telemetry EEG monitoring your child should wear comfortable clothing that can be easily changed without taking it over the head. Clothing that buttons or zips up at the front is best. Your child will need to stay in bed for the period of monitoring so that they are in view of the cameras at all times. This includes during meal times. It is therefore advisable to bring several changes of clothes. Parents/carers can have access to laundry facilities, and you will have to pay for this. Details of these are available from the ward.

Questions about the test
The doctor will explain about the test in more detail and discuss any worries you may have.

What does the test involve?
The Clinical Physiologist will attach small silver discs (electrodes) to certain points on your child’s scalp using special glue. Sometimes, they will measure your child’s head beforehand and mark the points with a soft pencil before attaching the electrodes. As each electrode is attached, they will clean the area of the scalp with a cotton bud and some cream.
This does not hurt but some children do not like it. While all the electrodes are applied your child can sit on a chair, the bed or your lap and can play with toys.

The electrodes are attached by wires to a ‘headbox’ and then to the recording machine. The Clinical Physiologist will record your child’s brainwaves on to the recording machine connected to a computer and monitor them on a screen.

Depending on the information the doctors gain from the results, the test may continue for five days. In some cases, a shorter time is enough to get the results needed.

The doctors may need to stop or reduce your child’s anti-epilepsy medicines for the test, but they will discuss this with you in more detail before the test starts. There should be instructions on how to do this on the admission letter sent a few weeks prior to the test. Please ring the number on that letter if you are unsure what to do or if there has been a change in the seizure pattern or medication doses since you were last seen in clinic.

The video cameras in your child’s cubicle will record his or her seizures/attacks during the test. Because of the need to stay in view of the cameras at all times your child will be restricted in their activities. We realise that this can be challenging for some children. There is a television in the cubicle and the Play Specialists that work on the ward may be able to provide craft materials and jigsaws. There is limited availability of computer games and televisions which play DVDs on the ward. These can be brought to the bedside. You are encouraged to bring items from home that will help keep your child entertained e.g. hand held games/tablet, personal DVD/CD players, jigsaws, books, school work etc.
Admission to the ward
You, or another adult member of your family, are required to stay with your child for the test, as family members are often best placed to identify a typical event or seizure should they occur. There is a bed available for a family member to stay overnight, next to your child’s bed.
Your child will be able to eat and drink as normal during the test. We will provide food and drink for your child but parents need to bring in food or buy it from one of the eating places in the hospital.

Are there any risks?
If the doctors decide to reduce or stop your child’s anti-epilepsy medicines for the test, they will decide this before you come to the hospital. The decision whether or not to do this depends on the number of seizures and the type of seizure your child is having. There is a small risk in reducing or stopping your child’s medicines in this way for the test. This can sometimes cause your child to have a longer or more intense seizure than usual. However, the doctors and nurses will be monitoring your child closely and we are more likely to capture some seizures during your 5 day stay if we reduce medication.

What happens after the test?
The Clinical Physiologist will remove the electrodes from your child’s scalp. This will not hurt as a liquid is applied to the glue to soften it before an electrode is removed. They will also clean your child’s hair but it may feel a bit sticky to the touch until you wash it.
If your child’s anti-epilepsy medicines have been reduced or stopped for the test, they will be started again straight away at the normal dose. This may mean that it takes 2 or 3 days for your child to feel back to normal and they should be kept an eye on at home until then. You will be able to take your child home once they have been reviewed by the doctor.
How long until we get the results?

You will not be given the results during your child’s stay. The doctors in the Neurophysiology (EEG) Department will write a report and send the results to your child’s referring Consultant who may write to you or discuss them at your child’s next appointment. If your child is being assessed for epilepsy surgery then the EEG will be discussed at the epilepsy surgery team meeting.

Contact Details

Department of Paediatric Clinical Neurophysiology
Royal Manchester Children’s Hospital
Oxford Road
Manchester M13 9WL
(0161) 701 7750

Ward 78
Royal Manchester Children’s Hospital
Telephone number: (0161) 701 7811

Epilepsy Surgery Nurse Specialist Practitioner (0161) 701 5072

Epilepsy Surgery Network Co-ordinator
Royal Manchester Children’s Hospital
(0161) 701 0769

Further Information about EEG

The department is open Monday to Friday between 8.30 am and 4.30 pm

If you require further information about EEG or neurophysiology then feel free to call us on (0161) 701 7750.

Alternatively you could consult:
Hospital website: www.cmft.nhs.uk

NHS direct website: www.nhsdirect.nhs.uk

Epilepsy Action website: www.epilepsy.org.uk
Travel Information
The multi-storey car park closest to the Children’s Hospital is on Hathersage Road.

Ward 78 is situated on the first floor
Royal Manchester Children’s Hospital

Suggestions, Concerns and Complaints
If you wish to make a suggestion, have a concern or want to complain, it is best in the first instance to speak to the manager of the ward or department involved.

The Trust also has a Patient Advice and Liaison Service (PALS) which can be contacted on (0161) 701 8700 or via e-mail: children.pals@cmft.nhs.uk. They will help you if you have a concern that can be resolved quickly, want advice, or wish to make a comment or complaint.

Information leaflets about the service are readily available throughout the Trust. Please ask any member of staff for a copy.

Notes
No Smoking Policy

Please protect our patients, visitors and staff by adhering to our no smoking policy. Smoking is not permitted in any of our hospital buildings or grounds, except in the dedicated smoking shelters in the grounds of our Central Manchester site.

For advice and support on how to give up smoking, go to http://www.nhs.uk/smokefree.

Translation and Interpretation Service

It is our policy that family, relatives or friends cannot interpret for patients. Should you require an interpreter ask a member of staff to arrange it for you.

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www.cmft.nhs.uk

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