Clinical Neurophysiology Department

Your Home Video Telemetry

Information for parents and carers

This leaflet provides information about home video telemetry (H-VTEL). We hope it answers questions that you, or those who care for you, may have. This leaflet will not replace discussions between you and your care team; however, it aims to help you understand more about what is discussed. If there is anything that you do not understand, please ask your care team.

What is home video telemetry?

Home video telemetry is a test that records the electrical activity of your brain for up to 48 hours and is carried out in the comfort of your home.

The nerve cells in the brain produce tiny electrical signals and these signals (also called brain waves) can be recorded via electrodes placed on the scalp. A digital video recording is also made alongside the EEG (study of the brain activity). The video enables the brain waves to be analysed in detail and matched with your movements, behaviours, symptoms or clinical events.

This test can help us to:

- identify the type of clinical event/seizure(s) you may be experiencing
- differentiate between seizures and other types of 'seizure-like attack'
- show where in the brain the seizure(s) originates from, and how the electrical activity of the seizure spreads throughout the brain
- diagnose and manage your epilepsy

Preparing for the test

- You should continue to take your medication as normal.
- You can eat and drink as normal.
- Please bring a list of your current medication with you to the appointment.
- Please wash your hair before the test and do not use any hair products such as gel or hairspray. Please remove any hair extensions/weave/wig before the H-VTEL.
- Please wear loose clothing, ideally a top/shirt which you can unbutton/unzip. Please avoid tight, long-sleeved tops if possible. This will allow you to change your clothes more easily once the electrodes are attached.
- You may wish to bring a hat with you to cover the electrodes for your journey home, any hat should be fine.

- You may wish to bring someone with you to your appointment as we will be explaining how to set up the equipment at home.

- During the test we recommend you stay fairly still and relaxed, so you may wish to book some time off work during your home video telemetry, if possible.

Please arrive on time for your appointment. If you are running late, please call us, or we may have to cancel or reschedule your test.

What will happen on my first visit?

- You will come to the Clinical Neurophysiology department at Charing Cross Hospital for your home video telemetry set-up. The appointment will take about 60-90 minutes.

- Your appointment will be with a member of the Clinical Neurophysiology team. They will explain the test in detail. They will also ask some questions about your medical history, your known family history, your current medication, and any clinical events/symptoms that you have or have had recently.

- It is important that you are involved in decisions about your care. We'll ask for your consent for the home video telemetry and video recording before we begin. You can withdraw your consent at any time, even if you have previously agreed.

- You will be given a demonstration of how to set-up and use the video camera at home. You will also be shown a video.

- You will be instructed to press an 'event button' if you experience a clinical event/seizure, warning signs of your events/seizure, or any of your reported signs or symptoms during the recording.

- You will be provided with spare AA batteries and shown how to change them if indicated. You are unlikely to need to change them, but we'd like to show you how just in case.

- You will also be asked to complete a diary sheet during the investigation.

- When you are happy with the investigation and set-up, a head measurement will be taken before small silver discs (electrodes) are applied to your scalp using a sticky paste and special glue that will later be washed out. A few additional electrodes may also be applied to your chest and/or shoulders to monitor your heart rate and movements. The electrodes are attached by wires to a portable box, held in a small bag which you will carry around with you. We can answer any questions you have at this time.

- We will take a baseline recording while you are in the department. During this time, you may be asked to participate in some 'activation procedures' to provide us with additional information. This might include doing some deep breathing or looking at a flashing light. Activation procedures will be discussed with you during your appointment and only performed if they are relevant to your clinical events/seizure-type.

- You will return home, and the EEG and video will record for up to 48 hours.

While the test is going on

- You will be instructed to press an ‘event button’ if you experience a clinical event/seizure, warning signs of your events/seizure, or any of your reported signs or symptoms during the recording.
- When you arrive home, you must remove the camera from the briefcase and plug it into the mains power supply. Please ensure it remains plugged in throughout.
- Open the LCD screen and press the red button to start the recording.
- Place the camera on a flat, stable surface. Please keep the camera directed to you for as much of the investigation as possible. You will need to move the camera to the bedroom at night-time, and if you are moving around the house. You do not need to zoom in or out.
- You are permitted to be off camera for brief periods when privacy is required and there is no need to use the video in the bathroom. Please make any family members or visitors aware that they will be recorded if they are in view of the camera. All sound will also be recorded.
- The LCD screen should be kept open throughout. If this is knocked or closed by accident, you must re-open the screen and press start recording.
- You will be unable to take a shower or bath during the investigation and must avoid getting the electrodes and bag wet.
- Please do not chew gum, because this affects how well the EEG records.
- Please refrain from physical exertion as much as possible (unless specifically discussed with your doctor). We achieve the best quality EEG recordings from patients who remain relaxed and fairly still during the investigation. Complete the diary sheet.
- If you have a seizure, clinical event or symptoms (as discussed previously with your doctor), push the event button as instructed.
- You must change the batteries in the headbox after approximately 24 hours. You will be provided with batteries.
- The H-VTEL equipment and video camera is your responsibility from when you leave the department until you return the hospital. Please take care of the equipment and try not to pull any of the electrodes.

During your second appointment/after the test

- You will attend the Clinical Neurophysiology department at Charing Cross Hospital to return the equipment and have the electrodes removed. This appointment will take approximately 30-60 minutes.

- Please bring all the equipment and the diary sheet. If you had no seizures or clinical events during the recording, please do not worry as the EEG can still provide useful information.

- The electrodes and skin glue will be removed using a special solution. You will need to wash your hair when you get home to remove any excess paste and glue.

- You may wish to bring a brush or comb with you to tidy your hair after the electrodes are removed, or a hat to cover your hair.

- The results will be analysed and a report will be sent to your consultant in 2-3 weeks. Your referring consultant will then contact you to explain your results.

Are there any risks or complications?

There are no common side effects to a home video telemetry. The electrodes simply read the electrical activity in the brain. It is not painful or invasive.

On rare occasions, the skin can be slightly sore around the areas where the electrodes and glue has been applied. These symptoms should start to resolve once the electrodes are removed.

Contact us

If you are unable to attend your appointment or have any questions or concerns about your appointment, please contact us on:

Neurophysiology Department Charing Cross Hospital: 020 331 11329 / extension 17515

Neurophysiology Department St Marys Hospital: 020 331 26628

We are open Monday-Friday 8am-4pm

How to find us:

For your home video telemetry appointments, you will attend:

Charing Cross Hospital: Main Tower Block > South Wing > 3rd Floor

Nearest train stations:

- Barons Court: Approximately 10-12 minutes' walk from station
- Hammersmith: Approximately 10-12 minutes' walk from station or a 5-minute bus ride

Local buses: 190, 211, 220, 295

***Please arrive on time for your appointment. If you are running late, please contact us otherwise we may have to cancel or rebook you for another time.**

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3313 0088** (Charing Cross, Hammersmith and Queen Charlotte's & Chelsea hospitals), or **020 3312 7777** (St Mary's and Western Eye hospitals). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:
Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street
London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: **020 3312 1337 / 1349**

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

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