

Clinical Neurophysiology Department

Video Telemetry (VTEL)

Information for patients, relatives and carers

This leaflet provides information about video telemetry (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 physician.

What is video telemetry?

An electroencephalogram (EEG) is a test that records the electrical activity within your brain. 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.

Video telemetry is a type of long-term EEG study that records the brain activity for up to three days. A digital video recording is also made alongside the EEG, as this enables the brain waves to be analysed in detail and matched with your movements, behaviours, symptoms or clinical events/seizures.

This can help to identify the type of clinical event/seizure(s) you may be experiencing, show where in the brain the seizure(s) originates from, and how the electrical activity of the seizure spreads throughout the brain. This test can help with the diagnosis and management of epilepsy and also differentiate between seizures and other types of 'seizure-like attack'.

Preparing for the test

- Video telemetry is carried out in 10 North ward, 10th floor, Main Tower block, Charing Cross hospital. You will be allocated a private room with ensuite facilities. You will need to always remain in the room and will have a limited range of movement around the bed area, as you will be connected to a computer via a cable, and you will need to be visible on the camera throughout. You may wish to bring a laptop, books and/or other activities to pass the time during your admission (free hospital Wi-Fi is available). Visiting is permitted in line with the Trust visiting policy. For further information on visiting, please speak with the Nurse In-Charge of the ward.
- Please bring all regular medication with you and continue to take your medication and meals as normal (unless you have been advised otherwise by your doctor prior to admission).
- Please wash your hair before the test and ensure you do not use any additional hair products such as gel or hairspray. Please remove any hair extensions/weaves/wigs before the EEG.

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- Pack enough clothes, toiletries and any other essentials you may need for up to three days. You will be able to change clothes during the investigation; however, we advise loose clothing and zip/button front tops as opposed to clothing which must be lifted over your head, as this may disrupt the recording electrodes.
 - Please be advised that when you arrive the admitting nurse will complete a property registry log with you to record any belongings that you may have brought with you to the ward. Please do not bring valuables and/or large sums of money with you as the hospital takes no responsibility for any lost or damaged property during your hospital stay.
 - Please inform the ward in advance if you have any special requirements that could help improve your stay. During your admission we aim to make sure you are safe from any injury that might occur in case of a clinical event/seizure, and we will conduct a risk assessment before your arrival.

During your visit

- When you arrive on the ward, a member of the Neurophysiology team will explain the investigation in detail. You will have the opportunity to ask any questions at that time; alternatively, you can contact the Clinical Neurophysiology department before the test and ask to speak to the Neurophysiologist directly (020 3311 1325).
- It is important that you feel involved in decisions about your care. We will ask for your consent for the investigation and video recording will be taken before we start the investigation. You can withdraw your consent at any time, even if you have previously agreed.
- When both parties are happy to proceed, a head measurement will be taken before small silver discs (electrodes) are applied to your scalp using a conductive paste and special glue. 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 small, portable box and then to the recording machine. The data recorded will be displayed on a small screen in your room and will also be monitored throughout the day within the Clinical Neurophysiology department.
- The duration of your stay will be confirmed before your hospital stay. The duration is typically 48 hours. If it's deemed necessary, your investigation may be extended for another day, but this will be discussed with you.
- As mentioned above, a dedicated video camera will record you during the investigation. You can move around within the room, but please ensure you stay in the range of the camera. We achieved the best quality EEG recordings from patients who remained relaxed and fairly still during the investigation.
- You will be able to use the toilet as usual (there are no cameras in this area); however, it is not possible for you to bathe or shower during the monitoring period.
- For safety purposes, you may also be encouraged to stay in the bed as much as possible and you may be asked to raise the sides of your bed to reduce the risk of falls. Please ensure that you use your call bell to alert the nursing staff if you need to get out of bed or go to the bathroom so that they can support you to manage the monitoring equipment.

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- The Neurophysiology team and ward doctors will take a detailed history, focusing on your clinical symptoms or events. The purpose of the telemetry EEG is to document one of your habitual seizures or episodes. If you have a seizure or episode, you will be asked to identify, describe and log them in the event diary provided and press the red button that marks the recording.
 - During the investigation, you may also be asked to participate in some 'activation procedures' to provide us with additional information. This includes doing some deep breathing and looking at a flashing light. Activation procedures will be discussed with you during your stay and only performed if they are relevant to your clinical events/seizure-type.
 - You will be able to eat and drink as normal during the test. We will provide food and drink for you throughout your stay, but please inform the staff on arrival if you have any allergies or intolerances and they will ensure they meet your dietary needs.

What happens after the test?

- At the end of the investigation, the electrodes will be removed using an adhesive remover. This should not hurt but may feel cold. Your hair may feel sticky to the touch, and you may find some glue residue immediately after the investigation; this will come out when you wash your hair. Once the investigation is complete, you will be welcome to shower/wash your hair before you leave hospital. Once you get home, you can resume your normal activities. Please continue with your medications as advised by your Consultant Neurologist.
- You will not be given any results during your stay. In the weeks following, the EEG data will be analysed, and a report will be written and sent to your referring Consultant Neurologist. They may send you a letter outlining the main findings of the investigation and/or the results will be discussed with you at your next appointment.

Risk or complications following the test

There are no common side effects involved in the video telemetry process. On rare occasions, the skin can be slightly sensitive around the areas where the electrodes and glue have been applied. These symptoms should start to resolve once the electrodes are removed. If you have any concerns, please speak with the clinical team.

Contact us

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

Clinical Neurophysiology Department: 020 331 11325 / extension 17515

We are open Monday-Friday 08.00 – 16.00

How to find us

All video telemetry investigations take place at:

Charing Cross Hospital – Main Tower Block – 10th Floor – North Wing: 020 3311 1953

Please arrive on time for your appointment. If you are running late please contact us as we may have to make some adjustments; if we do not hear from you, we may decide to cancel or rebook your appointment.

Nearest train stations:

- Barons Court
- Hammersmith

How do I comment on 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 register your complaint 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 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

Clinical Neurophysiology Department
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