

Paediatric EEG Video-Telemetry (VT) Electroencephalography (EEG) with Video Recording

Your child's consultant would like them to have a VT recording. We hope that the following information will help with any questions you or your child may have.

What is a VT recording?

This is a long EEG recording usually undertaken over a few days in order for us to record some of your child's typical episodes. They will be monitored by a video camera throughout.

Your child may have had a routine EEG before. An EEG is a diagnostic test which records the natural electrical activity of the brain. Our brain cells communicate by producing tiny electrical impulses and the EEG recording is used to look for changes in this normal activity which can help with diagnosis and treatment of many disorders which involve the brain.

How do I prepare for the test?

- You will receive a letter from the hospital with all the details of your child's admission including date, time and directions.
- Your child will need to undertake a COVID-19 PCR test and have a confirmed negative result 72 hours prior to admission. Following this you and your child will need to self-isolate until your child's admission date.
- Your child will normally be admitted for between 2 and 3 days, this will depend on how quickly we record their episodes.
- Please continue to give any prescribed medication as normal.

- Your child should wear comfortable clothing/nightwear that can be undone and changed easily such as button-up pyjamas or shirts/blouses for daytime.
- Please bring your child with clean hair and avoid using hair sprays/gels etc on the day of your test.
- **Please ring Bramble ward before 8am on the day of admission to ensure a bed is still available on 01392 402679**

What happens during the test?

- Your child will be admitted to Bramble ward and will have access to a toilet and washing facilities
- Your child will be attached to the recording equipment in the room by a cable. Once the investigation has started your child is usually restricted to the bay/side room until the test is finished.
- A Healthcare Scientist, Healthcare science assistant, or trainee Healthcare Scientist will come to see you and your child, to set up the recording. Trainees are supervised by a qualified member of staff, the amount of supervision varies, depending on the amount of experience the trainee has. We will ask your permission if a trainee is performing the set-up.
- It is necessary for us to obtain your written consent for the video recording. We do not keep the entire video recording after the test because the file is too big; instead we keep parts of the video with your child's EEG recording (such as those showing any typical episodes). The video recording does not extend to the bathroom area.

- Your child can expect to have 23 small discs (electrodes) applied to their head on the day of the admission.
- The electrodes will be attached using special skin glue called 'Collodion'. This does not hurt but the glue has a strong odour until it is dry. We do not need to cut your child's hair or shave their head.
- These electrodes are attached to a small box which will be on a belt/shoulder strap and a cable connects this to a computer at the foot of the bed.
- Your child will need to remain in the bed space as much as possible, but will have access to the bathroom and be able to sleep without too many problems.

What happens after the test?

Once we have enough information, the electrodes will be removed using a special solution, which dissolves the glue. This leaves the hair feeling greasy but it does wash out easily.

How many episodes does my child need to have?

It all depends on the nature of your child's episodes and what we see on the EEG. We normally aim to record at least two, and possibly more.

If your child is having fewer than 2 episodes per week please ring and discuss this as it may not be worthwhile to do a VT test at this present time.

Are there any risks?

- If you are allergic or sensitive to cosmetics, lotions or sticky tape, please tell the Healthcare Scientist before the test starts.
- There is a small chance that during one of your child's episodes they may fall and this could result in an injury but this risk is no different to the risk as in your own home. **If your child injures themselves often at home during episodes please inform one of the nursing staff on your child's admission to Bramble ward so they can minimise any risk.**
- Your child may develop small sore areas on the skin where the electrodes are applied, this becomes more likely during longer recordings, however this is very rare and will not cause lasting damage.
- There is a small risk that the electrode wires could become entangled around your child, especially if they are active during sleep, or during an episode. Your Healthcare Scientist will be able to talk to you about how this risk can be minimised.
- There is a small risk that the collodion remover liquid may come in contact with the eyes during electrode removal. Staff will minimise the risk of this occurring.
- If your child thinks some of the liquid has got into their eyes, please advise the member of staff immediately.

When will I get the results?

After completing the examination, the results will be analysed and a report will be sent to your child's consultant. This may take up to 6-8 weeks.

How will the results of this test help?

Recording your child's typical episodes should give the consultant more information on the nature of their episodes and how best to treat their medical condition. If we do not manage to record an episode, sometimes we can still get some useful information from the EEG recording.

What are the consequences of not having VT?

An EEG is a well-established method of helping doctors to diagnose and treat a wide range of medical conditions. Your child's doctor would not have as complete a picture as required and therefore your child's diagnosis may take longer and/or their treatment may not be the most appropriate.

Contacting Us

Staff in the department will be happy to answer any query you or your child may have and will do their best to ensure your comfort.

If your child is currently having fewer than two episodes a week please ring us on the number below as soon as possible.

Please let us know if you are unable to attend the appointment by ringing the telephone number below.

If you or your child have any questions or concerns about the test please ring the **Neurophysiology Department on 01392 402458.**

We welcome feedback about our service. Please tell a member of staff if you felt this service is good or otherwise.

The Trust cannot accept any responsibility for the accuracy of the information given if the leaflet is not used by RD&E staff undertaking procedures at the RD&E hospitals.

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