

> Can we bring other children?

We strongly encourage you to organise alternative care for your other children because you will be required to observe your child and help with VEM while he or she is being monitored. Breastfed siblings are welcome at the bedside during the day, however for safety reasons, they cannot stay overnight. Any concerns should be discussed with the Epilepsy Nurse Specialist prior to admission.

> What happens if my child's seizures change or decrease prior to VEM?

If your child's seizures change or decrease in the period before the planned VEM, please contact your child's neurologist or the Epilepsy Nurse Specialist and check whether monitoring is still appropriate.



> Is VEM uncomfortable or painful?

As for routine EEG, electrodes are placed on the scalp. However instead of a simple paste or tape, a special glue is used to keep them in place. Some young children find the smell of the glue unpleasant or the noise of the air dryer disturbing.

The electrodes are attached on the first day of monitoring and will remain until VEM is finished. The electrodes are connected to a small recording unit, which is contained in a soft pouch, worn around the waist. Children quickly become accustomed to the electrodes on their head and usually do not experience any difficulty with sleep. Very rarely, a bandage might be put over a child's head if he/she keeps playing at the electrodes.

Extra gel may be put under the electrodes each morning and evening to maintain good EEG recording; some children find this annoying but the procedure is not painful.

A special solvent is used to remove the glue when the VEM is finished. Some children find this procedure uncomfortable. Fragments of glue and dried electrode gel may remain in the hair and it may take several hair washes and combs to remove it all. If your child has long hair, please bring along a hairbrush.



> Where to go?

Please report to the Admissions Desk on the ground floor of the main building at the time instructed by the Epilepsy Nurse Specialist. You will then be directed to the Children's Neuroscience Unit, on the 8th Floor.

> Privacy Statement

Video of you and your child will be recorded during VEM and stored as part of your child's health record.

Please refer to the Hospital and Departmental Privacy Statements available at www.childresepilepsy.org.au, or at time of admission. You will be requested at the time of admission to give consent for the recording, use and storage of video as part of VEM.

For more information about VEM:

- Epilepsy Monitoring Unit,
Telephone: (03) 9345 6909
- Epilepsy Nurse Specialist
Telephone: (03) 9345 7926

The Royal Children's Hospital
Flemington Road, Parkville, 3052

Or visit our web site at
www.childresepilepsy.org.au



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Video EEG Monitoring

Children's Epilepsy Program
The Royal Children's Hospital, Melbourne

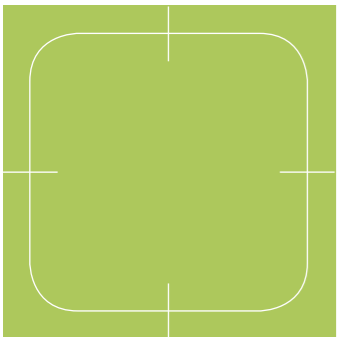
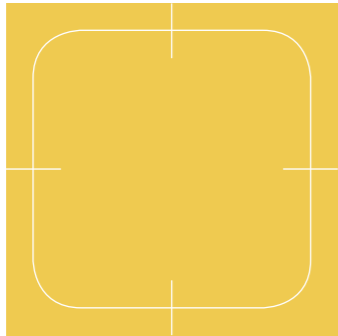
> What is Video EEG Monitoring?

Video EEG Monitoring (VEM) is a way of simultaneously recording your child's behaviour and brain electrical activity (EEG). It is done with synchronised equipment which records EEG, video and sound onto a computer for later analysis. In contrast to routine EEG recordings which are normally performed between episodes, video-EEG monitoring aims to record your child's EEG and behaviour during episodes.

> Why is VEM performed?

The main reasons children undergo VEM are to:

- distinguish epileptic seizures from episodes that may mimic epileptic seizures
- characterise the type or types of seizures that a child is having
- localise the part of the brain from where a child's seizures are arising.



> Where is VEM performed?

VEM is performed in the Children's Neuroscience Centre on the 8th Floor, where children with neurological and neurosurgical conditions are cared for.

> How long does VEM take?

The duration of VEM varies from one day and one night monitoring to continuous monitoring for up to five days, depending on how often your child is having episodes. Generally, we like to record 2 or 3 typical episodes. If your child has different types of episodes, we like to record examples of each if possible.

> What does your child do during VEM?

Your child will usually need to stay in bed or in a chair, in constant view of the camera at all times.

We realise that restriction of activity may be difficult for some children. Each bed has its own television, however limited play and school activities are available in the ward. You may bring toys, books, battery operated games and portable radio/CD players that can be used in the limited space of the ward. For school aged children we recommend that you bring school work to try and mimic normal daytime activity.



> What is the parent or carer required to do during VEM?

A parent, adult relative or attendant needs to be with the child at all times during VEM. VEM usually requires two people to be available to take turns with monitoring during the day and night. Please discuss this with your neurologist or with the Epilepsy Nurse Specialist, prior to admission.

The attendant plays an important role in VEM, being required to:

- Press a seizure button, record on a sheet of paper and occasionally report to staff, the time and type of episode. The attendant therefore needs to be familiar with the child's episodes.
- The attendant needs to also help keep the child occupied and on camera, is often the most difficult part of VEM.

The EEG technologists will demonstrate the video-EEG recording equipment when the VEM is set up.

If only one attendant is present, nursing staff will organise for someone to observe your child while you take a short break.

When staying overnight during VEM, you will need to bring a sleeping bag, pillow, toiletries and some reading or work. A single fold out bed will be provided next to your child's bed for you to sleep.

Meals are not provided for parents or carers. Breakfast is provided if you stay with your child overnight.

The hospital provides bathroom facilities and various food outlets for parents.

> Hair care before VEM?

To help reduce the amount of natural oil in the hair and aid EEG electrode application, it is important to thoroughly wash your child's hair the night before admission.

> What to wear during VEM?

During VEM, your child should wear comfortable clothing.

White clothes should be avoided, as these do not show up well on the video.

Nylon and satin clothes produce static electricity which affects the VEM equipment and therefore should not be worn.

> What about medications?

Sometimes a child's antiepileptic medication is reduced prior to or during VEM to bring on seizures. Please check with your child's neurologist or the Epilepsy Nurse Specialist prior to admission, as to the arrangements for your child's medication. Please bring your child's medication with you to ensure that the correct medications, strengths and doses are prescribed during the admission.

Please note that some children who have their medications reduced in hospital for VEM have stronger, longer or more frequent seizures than usual. Occasionally, intravenous or rectal medication needs to be given to stop prolonged seizures.