

Seizure testing in children

Information for children, families and carers

We have given you this factsheet because your child has been referred for a video telemetry (in hospital or at home) and we would like you to carry out seizure testing during this test. It explains what seizure testing is and what it involves, so you know what to do. We hope it helps to answer some of your questions. If you have any further questions or concerns, please ask the physiologist caring for your child or contact us using the details at the end of this factsheet.

What is seizure testing?

Seizure testing is when a child is asked some questions by a healthcare professional or a parent or guardian during and after a seizure. The questions aim to gather more information about the seizure by targeting different brain functions (for example, language, motor and memory).

Video telemetry

Seizure testing is usually performed during a video telemetry (VT), which is a special type of electroencephalogram (EEG). An EEG is a test that records the electrical patterns of the brain (brain activity). During a VT, while your child's brain activity is being recorded, a video camera will also record your child.

A VT is usually carried out over five days (or less) while your child stays in hospital, in a special room that has cameras in the ceiling, but it can also be carried out at home (if this is the case, we will provide you with a portable video camera). Although the video camera(s) will record the seizure(s), it can be helpful if you are also able to describe what you can see out loud for the audio recording, as well as writing it down in the seizure diary afterwards (we will provide you with this). The more information, the better.

Why is seizure testing important?

How your child responds to the questions can give your child's doctor important information about your child's seizures that can then be used alongside the results from the VT to find out where a seizure is starting and how it spreads in your child's brain.

When should I do seizure testing?

Only test your child after you have made sure they are safe first. Their safety is the most important thing when they have a seizure.

A good time to test your child is when they feel that a seizure is coming, or when their seizure is coming to an end. If your child usually remains aware throughout their seizures, test them during the seizure.

If your child feels a seizure coming or they start to have a seizure, press the 'event' button on the EEG machine (we will show you where this is during your child's first appointment). If your child is staying in hospital, make sure that a member of your child's healthcare team is aware of the seizure.

Depending on the type of seizure your child has, they may not respond during parts of or all their seizure. If your child is having a full body seizure, they may not be able to respond to any of your questions.

How do I test my child?

When your child feels a seizure coming or has a seizure

1. Make sure your child is safe. Press the 'event' button and, if your child is staying in hospital, call for a nurse.
2. Make sure your child is not covered by blankets and check you are not blocking the camera(s).
3. Look out for these signs:
 - jerking movements
 - eye deviation (when one or both eyes turn inward, outward, upward or downward)
 - changes to skin colour
 - sweating
 - drooling
4. Say out loud what you can see.

During your child's seizure

Ask your child the following questions:

- What is your name?
- What do you feel in your body?
- Can you lift your arms? If your child doesn't respond, demonstrate yourself and lift your arms.

If your child doesn't respond, continue repeating the questions above until they respond.

Once your child responds, move on to the next set of questions:

- Where are you?
- Can you repeat the word 'banana' and remember it for later?
- What is this? Show your child an object, such as a pen.
- Can you count to five?
- Do you remember the word I said?

After your child's seizure

- Do you know what just happened? Ask your child to describe as much as they can.
- What word did I tell you?
- What object did I show you?
- Can you move both of your arms and legs? Do any feel weak?
- Did you have a visual aura (any temporary changes to your vision, such as coloured or flashing lights)? Can you draw it? Skip this question if this doesn't apply to your child.

Continue asking your child these questions until they appear to be back to their usual self.

What if my child doesn't respond?

It is normal for children not to respond during certain parts of a seizure. If this happens, give your child a bit of time and then try again from the beginning. If they still don't respond, wait until they become more responsive and then try again.

If your child is in hospital, a member of your child's healthcare team will help to guide you on when to test and repeat testing.

When your child responds normally, you can stop testing them.

What if my child is not able to answer the questions?

We know that your child may not be able to answer these questions or follow these instructions, even when they feel well. This might be because of their age, how they learn, or other reasons. At the start of the week, your child's physiologist will go through the seizure test questions with them to see which ones are suitable. If needed, they will work with you to change the questions so that they are right for your child.

Contact us

If you have any questions or concerns, please contact us.

Neurophysiology team
Telephone: **023 8120 6785** (Monday to Friday, 9am to 4pm)

Useful links

www.uhs.nhs.uk/Media/UHS-website-2019/Patientinformation/Childhealth/Video-telemetry-716-PIL.pdf

www.nhs.uk/tests-and-treatments/electroencephalogram

If you are a patient at one of our hospitals and need this document translated, or in another format such as easy read, large print, Braille or audio, please telephone 0800 484 0135 or email PFSH@uhs.nhs.uk

For help preparing for your visit, arranging an interpreter or accessing the hospital, please visit www.uhs.nhs.uk/additionalsupport