learning disability

Generally, having a learning disability does not cause epilepsy, and having epilepsy does not cause a learning disability. Some people may have epilepsy and learning disabilities, and both may be caused by the same underlying problem in the way their brain works.

what is a learning disability?
A learning disability (sometimes called an ‘intellectual disability’) is something that can affect a person’s ability to learn new skills and information. It can also affect communication, and the ability to live independently. The level and effect of a learning disability will vary from one person to another. Some people may need support, while others are able to live more independent lives.

The causes of learning disabilities can vary but they generally happen before birth or in childhood (before 18 years of age). Some learning disabilities are related to genetic conditions, such as Down’s syndrome, or are caused by a problem in the way the brain develops before birth. Brain damage at birth or from infections in early childhood can also cause a learning disability.

how often do epilepsy and learning disability happen together?
Epilepsy is more common in people with a learning disability than in the general population. Around 1 in 3 people (32%) who have a mild to moderate learning disability also have epilepsy. The more severe the learning disability, the more likely it is that a person will also have epilepsy.

Around 1 in 5 people (20%) with epilepsy also have a learning disability.

how are seizures different for people with a learning disability?
There are many types of epileptic seizure and for anybody with epilepsy they can affect awareness, feelings, movement or behaviour. For example, focal impaired awareness seizures (previously called ‘complex focal seizures’) can include automatisms (repetitive movements without a purpose) such as lip smacking or fiddling with clothing. Confusion can also be part of a seizure, and many people have periods of confusion after a seizure.

Because appearing confused, or having difficulty in communicating, can be part of having a learning disability, seizures may sometimes be hard to tell apart from behaviour due to a learning disability.

When someone has unusual movements or behaviour it can be helpful to film it, or write down details of what happens, if the person agrees that you can do this. This may help the doctor to see whether or not this is a seizure.

See our leaflets seizures and diagnosis for more information.

What happens during a seizure in someone with a learning disability will not necessarily be any different from what happens in someone without a learning disability. However, for some people with a learning disability, seizures may appear different in any of the following ways:

• their seizures may be more frequent;
• their seizures may go on for longer;
• their seizures may be too complex to put into a typical seizure ‘category’;
• they might have more than one type of seizure, and could have one type of seizure closely followed by another type of seizure; or
• their seizures may include subtle movements or behaviours that can be difficult to recognise as a seizure, sometimes described as ‘atypical’.

how is epilepsy treated in people with a learning disability?
Treatment of epilepsy usually involves taking anti-epileptic drugs (AEDs) to prevent seizures from happening. Treating people with a learning disability can often be more difficult as their seizures may be more prolonged or frequent. In both cases, this may be due to the underlying cause or brain damage.

Being able to understand their own epilepsy, and how to manage the treatment for it, is important for everyone taking AEDs.

See our booklet medication for epilepsy.
Some people with learning disabilities find it difficult to understand how and why they need to take their AEDs. They may need help with understanding this from relatives, carers or the health professionals involved in their care.

See our pack About epilepsy which contains easy read information on taking medication.

For people whose seizures are not controlled with medication, there may be other treatment options to help reduce seizures, for example brain surgery or Vagus nerve stimulation (VNS) therapy. There are many things that are taken into account when someone is considered for surgery or VNS therapy. Each case is looked at individually to consider the possible benefits and risks.

See our factsheets epilepsy surgery and VNS therapy.

can AEDs cause side effects or changes in behaviour?

As with all medications, drugs for epilepsy can cause side effects for some people. People with a learning disability may be more likely to have side effects, because their brain has areas of damage that are more vulnerable to side effects.

Side effects can include feeling drowsy or sick, having problems with vision, or changes in behaviour. Some people have poor attention, feel restless, or have slow or unsteady movement. A person’s mood can also be affected by AEDs in some cases.

Side effects can be difficult to tell apart from behaviour related to a learning disability. Also, if someone is not able to express what they are feeling, they may be withdrawn, or show aggression or other challenging behaviour. This could be mistaken for a side effect of their AEDs.

can epilepsy impair ‘cognitive function’?

Cognitive function is the process of knowing, thinking, and learning. For people with learning disabilities and epilepsy, difficulties with this process are usually due to the underlying cause, rather than to the epilepsy itself. If a person has stopped having seizures, and their drug plan can be kept simple, there may be less risk of their cognitive function being affected.