Events that can be confused with epilepsy

Seizures usually involve temporary changes in behaviour and movement and there are many events that can mimic or be confused with seizures and vice versa. This can make epileptic seizures challenging to diagnose. Here, we discuss the most common medical events that can be mistaken for seizures.

Fainting

This is a sudden and short-lived loss of consciousness due to a sudden decrease in blood flow to the brain.

Fainting is often confused with epilepsy because sometimes the person can have jerks, twitching or convulsive movements associated with a faint. When someone has jerking movements, or what seems to be a seizure immediately following a faint, it is often called convulsive syncope. For the average onlooker, this can be difficult to distinguish from a seizure. It is usually short lived and very easy to manage. It may happen again with future faints, but it is not linked with epilepsy.

Up to 50% of children and adolescents and 6% of the general population, experience episodes of fainting. There are many possible causes of faints, and mostly they can be easily diagnosed from a good eyewitness description, which can help differentiate between a faint and a seizure.

For more about fainting and how to manage them, click here

Migraine

Just like seizures, there are different types of migraine. Some migraine have an “aura” that can be mistaken as other conditions like seizures or stroke, and people who have migraine don’t always get a headache. Also, the triggers for migraine can be similar to seizure triggers.

Migraine symptoms can include:

- Visual disturbances or hallucinations, blind spots
- Numbness or tingling sensations in the limbs, one sided paralysis
- Nausea and/or vomiting
- Extreme sensitivity to light and sound
- Tiredness, irritability, feeling depressed and have difficulty concentrating

Other reasons why migraine may be confused with epileptic seizures:

- Fainting may occur during the migraine
- Some types of migraine may begin with loss of consciousness and other symptoms, then be followed by headache
- Visual or sensory changes may be mistaken for focal seizures

However, migraine last a lot longer than seizures. Note that EEG changes may be seen in people who have migraine.

For more information about migraine click here

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Transient ischaemic attacks (TIA’s)

These are sometimes called ‘mini strokes’ and as the name suggests, are only temporary. They occur because a small part of the brain has of a short period with not enough blood supply. TIA’s often last a few minutes, but can be longer, usually resolving within 24 hours.

The person can have weakness and sensory changes, such as numbness and tingling, and these symptoms are what may be confused with seizures. TIAs usually last longer than seizures and loss of consciousness is rare.

After a TIA, your risk of stroke is higher. Don’t ignore the signs. Call 000 or see your doctor as soon as possible.

For more information on TIA’s, [click here](#)

Sleep disorders

Like seizures, sleep disorders (some are called sleep parasomnias) can be characterised by confusion, unusual behaviour and abnormal movements.

Sleep disorders that may be confused with seizures include night terrors, sleep walking, movement disorders, bed wetting, sleep apnoea, REM sleep behaviour disorders and narcolepsy.

For more information on sleep and sleep disorders go to:

- [Sleep Disorders](#)
- [Sleep](#)

Drop attacks

These are sudden falls to the ground without warning while walking or standing. They occur during tonic or atonic seizures; however, they also can happen with other conditions such as:

- [Meniere’s Disease](#) – which affects the inner ear and balance
- [Narcolepsy](#) – a sleep disorder
- Cardiac conditions, blood pressure drops or fainting

Dizzy spells

Dizzy spells can be caused by any number of circumstances, including the conditions listed in ‘drop attacks’ section above.

For more information about dizziness, [click here](#)

Daydreaming

Daydreamers can appear vacant, stare unintentionally and not respond for a short time.

In children this is common and can be confused with absence seizures. The difference is that daydreamers will respond to touch or loud noises while someone having an absence seizure will not.
Movement disorders

This describes a group of neurological disorders that involve the muscles and movement systems of the body. Tics and involuntary movements may sometimes be confused with myoclonic seizures or focal aware seizures. However, movement disorders do not cause loss of consciousness or EEG changes: although some conditions may respond to antiseizure medication.

There are many different causes of movement disorders including Parkinson’s Disease, Huntington’s Chorea, Tourette’s Syndrome, and essential tremor. Some movement disorders can be drug induced.

For more information about movement disorders, click here

Breath holding attacks

These can be seen in children aged 6 months to 6 years. They usually occur after the child has become frightened, hurt or upset and are a reflex. Children don’t have breath holding attacks on purpose.

The child may initially cry, or just open their mouth like they are about to cry but make no noise. This is the (involuntary) breath holding period. They can then become pale, limp, faint, arch their back or jerk their limbs. Breath-holding attacks can be frightening to watch but are not usually serious and don’t cause lasting damage. With time, they go away on their own.

Sometimes breath-holding can lead to a seizure, but this is not considered epilepsy.

For more information about breath holding attacks, click here

Cardiac events

Heart problems can cause epilepsy-like symptoms. These occur when the heart isn’t functioning properly. Examples are when a person has an irregular heart rate or clogging of the arteries, which can cause dizziness or blackouts, depending on the severity of the condition.

Febrile convulsions

A febrile convolution is a seizure that happens in babies, toddlers and children when they have fever. This is because the developing brain of a toddler or child is more sensitive to fever than an adult brain. There also appears to be a tendency for these seizures to run in families.

Between 2-4% of children have one or more febrile convulsions by the age of five years. Approximately two thirds of those children, will only have the one seizure, while others may have further seizures associated with fevers until about age 6. For these children, the risk of developing epilepsy is no different from that of the general population and their development is not affected.

A small proportion of febrile seizures are more complex – that is, if they last longer than 15 minutes; if more than one seizure happens in a short period; or if seizures have focal features. In this group, the risk of developing epilepsy is higher.

For more information about febrile convulsions, click here
Panic attacks
These are also known as anxiety attacks. Common symptoms include:

- Increased heart rate
- Sweating
- Nausea
- Difficulty breathing
- Sense of unreality
- Chest pain
- Feeling faint, dizziness
- Smothering sensation
- Feelings of impending doom
- Fear of loss of control

During a panic attack some people genuinely believe they’re having a heart attack or are on the verge of death. They can occur at any time and may occur several times a day or may happen only once every few years. They usually last longer than seizures, with an attack generally peaking within 10 minutes, but some symptoms may last much longer.

Occasionally focal seizures may cause similar symptoms.

For more information about panic attacks, click here

Concussion (impact convulsions)
Very occasionally, seizures can occur within seconds of a head impact. These seizures are non-epileptic and occur as a direct consequence of the impact.

Only a small percentage of impact convulsions are associated with structural brain damage and lead on to developing post-traumatic epilepsy. The majority of cases are benign and associated with a good prognosis.

For more information about concussion and how to manage it, click here

Psychogenic Non–Epileptic Seizures (PNES)
These differ from person to person and may present in many ways such as changes in the person’s behaviour or movements (twitching or jerking) or collapsing. The person may or may not be aware of what is happening. The events can last much longer than a seizure.

PNES has an emotional or psychological cause rather than a physiological one and can be seen in people with or without epilepsy. These episodes do not have the EEG changes that are seen with an epileptic seizure and have a different course of treatment.

Around 1 in every 6 people who go to a specialist epilepsy centre for investigation of poorly controlled seizures have PNES. People can have both epilepsy and PNES.

Also known as Functional Neurological Disorder or Dissociative Non–Epileptic Seizures.

For more information see: Factsheet – Psychogenic Non-epileptic Seizures
Tests for seizures

The best way to determine if any event is a seizure is to record it on video EEG.

Unfortunately capturing an event can be difficult, as they are often sporadic, short-lived, unpredictable, and many people don’t have access to these services.

Therefore, a careful description of what happened is valuable. Diagnosis is more difficult without this eyewitness description. Sometimes a home video of the event can also help.

It is important to obtain a correct diagnosis to avoid being treated with medication unnecessarily. Unfortunately, sometimes, this does happen. In these cases, the chosen treatment does not work mainly because it is not the right one for the condition.

If you do not respond to antiseizure medications, further tests may be needed to explore other possible diagnoses. Sometimes a doctor may decide to wait and see if a similar event occurs again before undertaking further testing.

If you cannot get into the hospital system for video EEG, then Seer Medical also do this testing and you can be recorded over seven days at home. Its bulk billed.

For more information:

Conditions similar to epilepsy

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References


