Epilepsy: definition, causes, symptoms, treatment etc.

Are you a victim of epilepsy? Do you know someone who has been a victim of this adversity for a while now? Many people wonder if they can use CBD for epilepsy and seizures and if it helps. This also raises the question of how it actually works in the case of Epilepsy. What studies are there and what do people say that have successfully used CBD in epilepsy?

Probably the most prominent example in which the use of CBD has helped is in Epilepsy. As per the results of a recent research, it has now been clinically proven that the use of CBD oil is remarkably effective in alleviating the symptoms of epilepsy and taking the seizures under control not only in terms of intensity but also in frequency. The positive measurable impact that CBD oil has to offer against epilepsy is a groundbreaking research to say the least. More details on the studies, the mode of action and reports on CBD for epilepsy and seizures can be found in the following lines.

From genetic predisposition to severe head injury, another brain disease or infection, a stroke, lack of oxygen, or an inexplicable change in the structure of the brain.

In most cases, doctors can't point out a particular cause for the illness.

While this kind of disease has no cure, one can live with epilepsy with the right treatment and safety measures.

How come CBD came into the attention of people suffering from epilepsy and seizures and their families and caregivers? When the traditional epilepsy treatment is not working, the family of the patient would try anything that promises some kind of results.

Considering that CBD is a natural treatment extracted from plants, the cannabis plant more precisely, the risks of taking the treatment are almost inexistent. CBD does not cause psychoactive effects either, so it is safe to use in the case of children as well.

Many parents with children that suffer from epilepsy and seizures found that CBD works much better than their regular meds, significantly improving the quality of their lives and reducing the occurrence of seizures with an incredible efficiency.

The antiepileptic properties of CBD epilepsy treatment have proven to reduce the seizure count and severity of seizures. Furthermore as a result of cannabidiol, often seizures are completely eliminated. If you were to believe the anecdotal reports, there is a success rate of at least 90%, which is probably better than any of the epilepsy meds.

What is Epilepsy?

Epilepsy is a chronic disorder that causes unprovoked, recurrent seizures. A seizure is a sudden rush of electrical activity in the brain.

Epilepsy or 'seizure disorder' is characterized by unpredictable seizures and can cause other

health problems such as injuries, brain damage from repeated seizures and even death. When someone has a seizure it seems like this is usually misunderstood by the public. These misunderstandings often cause the same amount if not more problems for the patient then epilepsy itself.

It’s estimated that almost 65 million people worldwide have epilepsy. And in the United States there are roughly 1 million people with treatment resistant epilepsy, according to Dr. Michael Privitera MD.

Epilepsy is the 4th most common neurological problem – only migraine, stroke, and Alzheimer’s disease occurs more frequently.

Almost 3% of dogs suffer from seizures. While some dog breeds have almost no epilepsy cases, some particular breeds suffer quite frequently from epilepsy, which is an inherited disorder.

Besides successful results with epilepsy, there are many other CBD oil health benefits and only a few minor CBD side effects.

There are two main types of seizures. Generalized seizures affect the whole brain. Focal, or partial seizures, affect just one part of the brain.

A mild seizure may be difficult to recognize. It can last a few seconds during which you lack awareness.

Stronger seizures can cause spasms and uncontrollable muscle twitches, and can last a few seconds to several minutes. During a stronger seizure, some people become confused or lose consciousness. Afterward you may have no memory of it happening.

Why does a person have seizure?

There are several reasons you might have a seizure. These include:

- high fever
- head trauma
- very low blood sugar
- alcohol withdrawal

Anyone can develop epilepsy, but it’s more common in young children and older adults. It occurs slightly more in males than in females.

There’s no cure for epilepsy, but the disorder can be managed with medications and other strategies.

What are the symptoms of epilepsy?

Seizures are the main symptom of epilepsy. Symptoms differ from person to person and according to the type of seizure.

Focal (partial) seizures

A simple partial seizure doesn't involve loss of consciousness.

Symptoms include:

- alterations to sense of taste, smell, sight, hearing, or touch
- dizziness
- tingling and twitching of limbs

Complex partial seizures involve loss of awareness or consciousness. Other symptoms include:

- staring blankly
- unresponsiveness
- performing repetitive movements
- Generalized seizures

Types of Eplilepsy

Generalized seizures involve the whole brain. There are six types:

1. Absence seizures, which used to be called "petit mal seizures," cause a blank stare. This type of seizure may also cause repetitive movements like lip smacking or blinking. There's also usually a short loss of awareness.
2. Tonic seizures cause muscle stiffness.
3. Atonic seizures lead to loss of muscle control and can make you fall down suddenly.
4. Clonic seizures are characterized by repeated, jerky muscle movements of the face, neck, and arms.
5. Myoclonic seizures cause spontaneous quick twitching of the arms and legs.
6. Tonic-clonic seizures used to be called "grand mal seizures."

Symptoms include:

- stiffening of the body
- shaking
- loss of bladder or bowel control
- biting of the tongue
- loss of consciousness
- Following a seizure, you may not remember having one, or you might feel slightly ill for a few hours.

What triggers an epileptic seizure?

Some people are able to identify things or situations that can trigger seizures.

A few of the most commonly reported triggers are:

- lack of sleep

- illness or fever
- stress
- bright lights, flashing lights, or patterns
- caffeine, alcohol, medicines, or drugs
- skipping meals, overeating, or specific food ingredients

Identifying triggers isn’t always easy. A single incident doesn’t always mean something is a trigger. It’s often a combination of factors that trigger a seizure.

A good way to find your triggers is to keep a seizure journal. After each seizure, note the following:

day and time

what activity you were involved in

what was happening around you

unusual sights, smells, or sounds

unusual stressors

what you were eating or how long it had been since you’d eaten

your level of fatigue and how well you slept the night before.

You can also use your seizure journal to determine if your medications are working. Note how you felt just before and just after your seizure, and any side effects.

Bring the journal with you when you visit the doctor. It may be useful in adjusting your medications or exploring other treatments.

Is epilepsy hereditary?

There may be as many as 500 genes that relate to epilepsy. Genetics may also provide you with a natural “seizure threshold.” If you inherit a low seizure threshold, you’re more vulnerable to seizure triggers. A higher threshold means you’re less likely to have seizures.

Epilepsy sometimes runs in families. Still, the risk of inheriting the condition is fairly low. Most parents with epilepsy don’t have children with epilepsy.

In general, the risk of developing epilepsy by age 20 is about 1 percent, or 1 in every 100 people. If you have a parent with epilepsy due to a genetic cause, your risk rises to somewhere between 2 to 5 percent.

If your parent has epilepsy due to another cause, such as stroke or brain injury, it doesn’t affect

your chances of developing epilepsy.

Certain rare conditions, such as tuberous sclerosis and neurofibromatosis, can cause seizures. These are conditions that can run in families.

Epilepsy doesn't affect your ability to have children. But some epilepsy medications can affect your unborn baby. Don't stop taking your medications, but do talk to your doctor before becoming pregnant or as soon as you learn you are pregnant.

If you have epilepsy and are concerned about starting a family, consider arranging a consultation with a genetic counselor.

What causes epilepsy?

For 6 out of 10 people with epilepsy, the cause can't be determined. A variety of things can lead to seizures.

Possible causes include:

- traumatic brain injury
- scarring on the brain after a brain injury (post-traumatic epilepsy)
- serious illness or very high fever
- stroke, which is a leading cause of epilepsy in people over age 35
- other vascular diseases
- lack of oxygen to the brain
- brain tumor or cyst
- dementia or Alzheimer's disease
- maternal drug use, prenatal injury, brain malformation, or lack of oxygen at birth
- infectious diseases such as AIDS and meningitis
- genetic or developmental disorders or neurological diseases

Heredity plays a role in some types of epilepsy. In the general population, there's a 1 percent chance of developing epilepsy before 20 years of age. If you have a parent whose epilepsy is linked to genetics that increases your risk to 2 to 5 percent.

Genetics may also make some people more susceptible to seizures from environmental triggers.

Epilepsy can develop at any age. Diagnosis usually occurs in early childhood or after age 60.

How is epilepsy diagnosed?

If you suspect you've had a seizure, see your doctor as soon as possible. A seizure can be a symptom of a serious medical issue.

Your medical history and symptoms will help your doctor decide which tests will be helpful. You'll probably have a neurological examination to test your motor abilities and mental functioning.

In order to diagnose epilepsy, other conditions that cause seizures should be ruled out. Your doctor will probably order a complete blood count and chemistry of the blood.

Blood tests may be used to look for:

- signs of infectious diseases
- liver and kidney function
- blood glucose levels

Electroencephalogram (EEG) is the most common test used in diagnosing epilepsy. First, electrodes are attached to your scalp with a paste. It's a noninvasive, painless test. You may be asked to perform a specific task. In some cases, the test is performed during sleep. The electrodes will record the electrical activity of your brain. Whether you're having a seizure or not, changes in normal brain wave patterns are common in epilepsy.

Imaging tests can reveal tumors and other abnormalities that can cause seizures. These tests might include:

- CT scan
- MRI
- positron emission tomography (PET)
- single-photon emission computerized tomography
- Epilepsy is usually diagnosed if you have seizures for no apparent or reversible reason.

How is epilepsy treated?

Most people can manage epilepsy. Your treatment plan will be based on severity of symptoms, your health, and how well you respond to therapy.

Some treatment options include:

Anti-epileptic (anticonvulsant, antiseizure) drugs: These medications can reduce the number of seizures you have. In some people, they eliminate seizures. To be effective, the medication must be taken exactly as prescribed.

Vagus nerve stimulator: This device is surgically placed under the skin on the chest and electrically stimulates the nerve that runs through your neck. This can help prevent seizures.

Ketogenic diet: More than half of people who don't respond to medication benefit from this high fat, low carbohydrate diet.

Brain surgery: The area of the brain that causes seizure activity can be removed or altered.

Research into new treatments is ongoing. One treatment that may be available in the future is deep brain stimulation. It's a procedure in which electrodes are implanted into your brain. Then a generator is implanted in your chest. The generator sends electrical impulses to the brain to help decrease seizures.

Another avenue of research involves a pacemaker-like device. It would check the pattern of

brain activity and send an electrical charge or drug to stop a seizure.

Minimally invasive surgeries and radiosurgery are also being investigated.