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brain [2]



Epilepsy is "the most common serious brain disorder worldwide with no age, racial, social class, national nor geographic boundaries" according to the World Health Organization. An estimated 40-50 million people have epilepsy, so it's good to be #seizuresavvy

#### Anyone can have a seizure

I did. Everybody's brain has a 'seizure threshold'; people with epilepsy have a lower seizure threshold, making them less resistant to seizures.

Importantly, one seizure does not signify epilepsy: a diagnosis usually depends on having two or more unprovoked seizures.

#### Brain

The brain works by electricity. In epilepsy, it produces sudden intense bursts of electrical energy, or 'storms' which disrupt its normal workings.

#### Causes

Usually, there is no recognisable cause. Sometimes, a blow to the head, a stroke, a tumour, toxins, infection or heavy drinking can result in seizure.

# Driving

You must tell the DVLA if you have had a seizure; your licence will most likely be taken away. When you can reapply depends on the type of seizure; an 'access to work' [3] grant may be possible if you can't use public transport.

# Emergency first aid





When someone is having a generalised seizure, the Epilepsy Society recommend three simple instructions. "<u>Calm.</u> <u>Cushion. Call</u> [4]". Most importantly, you should not put something in a person's mouth when they are having a seizure since it can injure the jaw or block breathing.

# **Focal seizures**

Formerly called <u>partial seizures</u> [5], they begin in one side of the brain and symptoms range from jerking and unusual movements to lip smacking, undressing, tingling, visual disturbances, fear, panic and a sense of déjà vu.

## Generalised seizures

Involving the whole brain, consciousness is usually lost. According to Professor Pamela Crawford, there are six major types, including absence seizures (a brief loss of awareness, typically happening dozens of times a day and sometimes mistaken for daydreaming), atonic seizures ('drop attacks') and tonic-clonic (grand mal) seizures in which limb stiffening is followed by rhythmic jerking.

## Hope

70% of individuals with epilepsy may become seizure-free shortly after starting drug therapy. After 2-5 years of successful treatment and being seizure-free, drugs can be withdrawn in about 70% of children and 60% of adults.

The <u>World Health Organization</u> [6] is concerned, however, that in low- and middle-income countries, about three quarters of people with epilepsy may not receive the treatment they need.

## **Identical twins**

My identical twin never had a seizure; I have had more than one. The <u>genetics</u> [7] of epilepsy is complicated but epilepsy can run in families.

# Juvenile myoclonic seizures

Beginning in childhood or adolescence, this inherited type of epilepsy is characterised by jerking movements of the arms and legs.

# Ketogenic diet

Is a <u>diet</u> [8] very rich in fat and low in carbohydrates and protein. When medication is not working to control seizures, it can be considered under specialist supervision

# Lights

Surprisingly, only about 4% of people with epilepsy have seizures that are triggered by flashing lights.

#### Music

In one study, listening to <u>Mozart's sonata</u> [9] for two pianos in D Major (K.448) reduced the number of seizures. Mozart as medicine?

## Nurse specialists

Can provide information about living with epilepsy and review your progress. There is <u>some evidence</u> [10] that they can help relieve anxiety and depression for people with epilepsy.

#### Older people

"A quarter of all new diagnoses of epilepsy are in older people," says Professor Pamela Crawford. "Some of it





probably goes unrecognized," she says. "Gran's 'funny turns' may not be seen to warrant medical investigation, but they may be a symptom of an underlying condition such as stroke. Seizures may pose an additional danger to older people, whose bones tend to be more brittle."

# Pregnancy

Anti-epileptic drugs may pose a risk to the unborn baby. It's important not to alter or stop your treatment, but to discuss your plans with your GP or neurologist.

# Questions

Epilepsy Action [11], the Epilepsy Society [12] and Young Epilepsy [13] are useful sources of support and advice.

#### Ribbon

Each year on <u>purple day</u> [14] (26 March), purple clothes and the purple ribbon are worn worldwide to start conversations about epilepsy and to raise important funds.

## SUDEP

Each year in the UK around 600 people experience Sudden Unexplained Death in Epilepsy (SUDEP), when they die without warning. Support can be found at <u>SUDEP Action</u> [15].

## Technology

A free app is available, called <u>EpSMon</u> [16], which helps a person work out their risk of having a seizure.

## Unrelenting

Most seizures self-terminate; if a seizure lasts more than five minutes, you should seek medical help.

#### Valproate

Has been used as an <u>anti-epileptic drug</u> [17] since 1963. Other drugs include carbamazepine, levetiracetam and lamotrigine. The drug of choice will depend on the seizure type.

#### William Morris

Was a Victorian designer and social reformer: his daughter Jenny had epilepsy at a time when the condition carried huge stigma. <u>A garden</u> [18] at the Chelsea Flower Show has explored the challenges of living with epilepsy then and now.

#### eXcision

For some hard-to-control types of epilepsy, the part of the brain causing the seizures may be surgically removed, or disconnected, from other parts of the brain.

#### Yawning

Whilst rare, excessive <u>yawning</u> [19] is associated with some seizure types.

# Zebrafish

Are tropical fresh-water fish important in research. <u>Scientists</u> [20] at the University of Sheffield are studying the effects of drugs for epilepsy on the zebrafish brain.







Source URL: https://helencowan.co.uk/z-epilepsy

## Links

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