Epilepsy and exercise

Summary

- Exercise is good for everyone, but it also has important benefits for people with epilepsy and can contribute to improved seizure control.
- Physical exercise rarely triggers seizures.
- Take all necessary safety precautions while exercising.
- Anti-epileptic drugs can affect sporting performance.

Epilepsy is a common condition of the brain in which a person has a tendency to have recurrent unprovoked seizures. People with epilepsy and their families are often concerned about exercise triggering seizures, which frequently results in overprotection and needless activity restrictions.

Exercise and epilepsy

Exercise is good for everyone, but it also has important benefits for people with epilepsy. Although in some types of epilepsy, seizures can be triggered by physical exercise, these are extremely rare and exceptional. In general, physical activity does not worsen epilepsy and in many cases it may even improve seizure control, most likely through improved overall health.

People with epilepsy can safely participate in most sports. Even contact sports have not been shown to trigger seizures. Water sports are also safe if seizures are well controlled and a direct supervisor is present.

Special care or caution is needed with sports involving heights such as some types of gymnastics (for example, parallel bars and uneven bars) or horse riding.

Sports that involve extreme risk if a seizure should happen, such as hang-gliding, scuba-diving, downhill skiing, free climbing and car or motorbike racing are not recommended.

Additional limitations are necessary for people who have frequent seizures, or whose epilepsy is accompanied by other disabilities.

Most sports activities are safe but it is wise to avoid over-exertion, becoming dehydrated and hypoglycaemia (low blood sugar) as these situations can increase the risk of a seizure happening.

Exercise safety issues and epilepsy

General safety considerations may include:

- Avoid your known seizure triggers – for instance, if lack of sleep can be a seizure trigger for you, get a good night’s sleep before playing sport, or avoid exercise if you are overtired.
- Stay well-hydrated and eat something before exercising.
- Don’t continue exercising if you feel faint, lightheaded, nauseous or generally unwell.
- Don’t overexert yourself – know your limits.
- If heat or becoming overheated is a trigger for you, exercise in an air-conditioned gym or at a cooler time of day.
- Make sure your coach and possibly teammates know what to do if you have a seizure.
- If involved in solo exercise, consider wearing a medical alert bracelet or pendant, so people can easily identify you have epilepsy.
- Wear protective gear appropriate to your sport, such as a helmet.
Always wear a life jacket when involved in water sports.
Let family or friends know your walking, jogging or exercise route before you leave, and how long you will be out.
Consider carrying a mobile phone with an ICE (in case of emergency) telephone number listed.
Always take your medication as prescribed.

**Anti-epileptic medications and exercise**

Anti-epileptic medications are the mainstay of epilepsy treatment, but some of the side effects are likely to affect sporting performance. Some of the side effects for antiepileptic medications include:

- fatigue and tiredness
- blurred vision
- problems with concentration
- problems with balance and coordination
- poor motivation and energy
- slower reaction times

If you have medication side effects that are affecting your daily life and sporting performance, speak to your doctor about reviewing your medications.

If you take up a training program and lose a lot of weight, you may also need to have your medications reviewed as it may affect how your medications are absorbed.

Avoid taking anabolic steroids, as they can have long-term side effects and possibly interfere with anti-epileptic medication levels in the blood. Some people have reported seizures in relation to anabolic steroid use.

Engaging in physical activities and sports can help prevent or counteract the side effects of some antiepileptic medication, such as weight gain or increased fragility of bones.

**Exercise-related epilepsy triggers**

Seizures that happen during or after exercise may be due to triggers such as:

- extreme fatigue
- lack of sleep
- dehydration (and electrolyte loss)
- hyperthermia (elevated body temperature)
- hypoglycaemia (low blood sugar levels).

Suggestions to help you avoid these triggers include:

- Make sure you take your medication as prescribed.
- Drink plenty of water before, during and after exercise.
- Eat well before exercise and take a light snack or fruit if you need something immediately beforehand.
- Don’t push yourself to the point of physical exhaustion.
- If you are feeling very hot and tired, slow down or stop.
- Make sure you have at least two rest days every week.
- Make sure your diet is nutritionally adequate.
- Get plenty of rest and good quality sleep.
- Limit or abstain from alcohol.

**Where to get help**

- Your **GP (doctor)**
- Neurologist
- **Epilepsy Action Australia** Tel: **1300 37 45 37**