Epilepsy and Sleep

Sleep and epilepsy have a complex relationship. Epilepsy can affect your sleep quality, and the quality of sleep can affect your seizure control.

There are actions you can take to improve your sleep. These habits are known as “sleep hygiene” and they can be easy to incorporate into your daily life.

Sleep is important for everyone’s health and well-being. Sleep helps your brain work properly and assists in learning, improved problem solving, memory and attention. The relationship between sleep and seizures is intricate and sufficient good quality sleep can potentially improve your seizure control.

The relationship between sleep and seizures

The relationship between epilepsy and sleep is very complex. There are some epilepsy syndromes where seizures only occur during sleep or when waking which can have an impact on the quality of sleep.

Seizures are also much more likely to occur if you are tired or sleep deprived. Lack of sleep is a very common seizure trigger for people with epilepsy.

Many sleep disorders can mimic the symptoms of a seizure and may be missed in people with epilepsy, or misdiagnosed.

Being mindful of sleep and ensuring regular, good quality sleep is essential for people with epilepsy. Identifying what may be preventing good quality sleep and maintaining good sleep hygiene practices is important. If you experience sleep problems discuss this issue with your neurologist or GP.
Things that affect sleep

Sleep can be affected by many factors. Recognising what factors might be impacting on your sleep is important. You may like to start a sleep diary to identify what impacts your sleep.

Common factors that affect sleep include:

- Stimulants found in coffee, soft-drinks and nicotine.
- Use of electronic devices such as TVs and iPhones. These can emit a blue light which can interfere with your circadian rhythms (your natural wake/sleep cycle). Be aware of this when choosing to wear a sleep tracking device such as a Fitbit, etc.
- Mood: stress, anxiety and depression can all impact on your quality of sleep and ability to fall and stay asleep.
- Medications: Anti-epileptic drugs (AEDs) can have effects on sleep. Although some may improve sleep some may cause insomnia or disrupted sleep.
- Work schedule The body is synchronised to night and day by a part of the brain known as the circadian clock. Shift work can disturb this in turn impacting on sleep quality.
- Sleep disorders

Sleep disorders

Sleep disorders are conditions that cause problems with sleep on a regular basis. Examples include obstructive sleep apnoea, sleepwalking, nocturnal panic disorder, restless leg syndrome and parasomnias. Most sleep disorders will impact on the quantity and quality of a person’s sleep.

Sleep disorders are often overlooked in people with epilepsy. This may be because many sleep disorders mimic the symptoms of an epileptic seizure. Medical practitioners may attribute the symptoms and associated tiredness to the effect of AEDs or poor sleep quality caused by nocturnal seizures and not consider the possibility of a sleep disorder.

Obstructive Sleep Apnoea

Obstructive sleep apnoea is one of the most common sleep disorders and people with seizures are more likely to have sleep apnoea than the general population.

Epilepsy and sleep apnoea frequently co-occur and may negatively influence each other. Sleep apnoea, a disorder of abnormal respiration during sleep, can be caused by upper airway obstruction, abnormality in breathing regulated by the central nervous system or a combination of these factors.

Episodes of apnoea lead to hypoxemia (low blood oxygen) and to chronic sleep deprivation due to fragmented sleep. Sleep deprivation and hypoxia may decrease seizure thresholds in people with epilepsy resulting in poorer seizure control.

There is some evidence which suggests that AEDs exacerbate sleep apnoea by inhibiting respiratory drive centres and relaxing upper respiratory muscle tone, decreasing deep sleep cycles, or via medication related side effects such as weight gain.

Some evidence suggests that treatment of sleep apnoea may contribute to better seizure control. Treatment of sleep apnoea can include weight loss, maintaining oxygen flow through using continuous positive airway pressure (CPAP), oral appliances such as mouth guards, medications or surgery.

Healthy sleep tips

Many sleep problems are due to bad habits built up over a long period. You won’t fix sleeping problems in one night: persevere with good sleep hygiene and sleep should improve. You may need to experiment with different strategies to find out what works for you. Above all don’t obsess about your sleep problems.
Get enough sleep

The amount of sleep needed varies across ages. The National Sleep Foundation recently published new sleep guidelines suggesting that adults between the ages of 25 and 63 require seven to nine hours of sleep each night, while those over 65 require seven to eight hours of sleep.

Listen to your body clock

- Understand your sleep needs. Although the guidelines have recommendations your actual sleep needs may be more or less than the guidelines recommend.
- Try to spend some daytime outdoors. This helps the body produce melatonin which is important in promoting sleep.
- If you aren’t sleepy – don’t go to bed.
- Don’t stay in bed if you are awake and can’t fall asleep. If you can’t fall asleep within 20-30 minutes get up, leave the room and do a boring activity.

Build your perfect sleep environment

- Evaluate your bedroom to ensure the ideal set up. Consider temperature, sounds, lights and comfort of your bed. Your bedroom should be quiet, cool and dark.
- Only use your bed for sleep. This builds an association of sleep with your bed which can help with falling and remaining asleep.

Avoid stimulants and drugs

- Don’t drink liquids with caffeine in the evening – try something like a hot cup of milk.
- Give up smoking. Nicotine in cigarettes has been shown to be a stimulant that contributes to sleep loss.
- Be aware of caffeine in other items such as soft drinks and energy drinks. Check the label to see if there is caffeine in what you are eating and drinking.

Develop a going to bed sleep routine

- Wake up and go to bed at the same time each day. This helps to keep your body clock synchronised. Stick to your bed routine and go to bed/wake up times even on the weekend.
- Settle your body and mind before bed. Don’t engage in stimulating activities before bed.
- Limit the use of electronic devices such as TV and iPhones. Try to switch off an hour before sleep.
- Be as relaxed as possible before going to sleep.

General lifestyle tips

- Get regular exercise but don’t exercise right before bed as this stimulates the body and makes it difficult to fall asleep.
- In general, people with epilepsy should avoid working night shifts as the significant loss or disruption to sleep can trigger seizures.
- If you are affected by insomnia or another sleep disorder, ask your doctor for advice because improved sleep could make a difference to seizure control.
- If you know you are going to have a late night compensate by having a nap earlier in the day and be aware you are at higher risk of seizures.
- Mood disorders and stress can interfere with sleep so you should seek help from your doctor.

Other resources

The Australian Sleep Association and the National Sleep Foundation [https://sleep.org](https://sleep.org) have great tips about improving your sleep. Find their links on our website.

Other helpful information about epilepsy, seizures and self-management strategies can be found on our website [www.epilepsyfoundation.org.au](http://www.epilepsyfoundation.org.au).

For more information and further resources contact our Information Line 1300 761 487.