



Brainwave The Irish Epilepsy Association
249 Crumlin Road
Dublin 12

Tel: 01-4557500 Email: info@epilepsy.ie Web: www.epilepsy.ie

Treatment of Epilepsy

Anti-Epileptic Medication

In most cases epilepsy is treated with medication. Over the past decades new drugs for epilepsy have become available which allow many people with epilepsy to live virtually seizure free lives. However, as each individual drug is likely to be most effective in controlling only certain types of epilepsy, the accurate identification of the type of epilepsy is important for the correct choice of drug.

There are a number of different drugs which are commonly prescribed for epilepsy and these may be referred to by the name of the drug itself (the generic name) or by its trade name (the brand name used by the company which makes the drug). The doctor's choice of drug may be limited by the fact that perhaps only one or two of these drugs are likely to be effective in controlling a particular type of epilepsy:

The first-line drugs used in the treatment of epilepsy are:- (trade name in brackets)

- Carbamazepine (Tegretol)
- Phenytoin (Epanutin)
- Ethosuximide (Zarontin)
- Sodium Valproate (Epilim)

The second line drugs used when the first-line ones do not appear to be working satisfactorily are:-

- Clobazam (Frisium)
- Vigabatrin (Sabril)
- Clonazepam (Rivotril)
- Topiramate (Topamax)
- Gabapentin (Neurontin)
- Oxcarbazepine (Trileptal)
- Lamotrigine (Lamictal)
- Tiagabine (Gabapentin)
- Phenobarbitone (Gardenal/Luminal)
- Levetiracetam (Keppra)
- Primidone (Mysoline)

Anti-epileptic drugs also come in many different forms - tablets, coated pills, capsules, syrups and liquids. There are many factors which can affect which form the doctor chooses.

For example, an injection of fluid may be preferred when the drug must be taken in to the blood stream quickly, whereas syrups are often used for people who may have difficulty swallowing tablets.

What do these drugs do?

Anti-epileptic drugs do not cure epilepsy they only control it. Some drugs work by making over-active brain cells less excitable, and other work by decreasing the brain cells' ability to transmit abnormal impulses to each other causing a seizure.

Maintaining a roughly constant amount of the appropriate drug in the bloodstream helps control of seizures. To achieve this the prescribed drug must be taken regularly, as near as possible to the times recommended by the doctor. Missed or late doses can reduce the concentration and could result in a seizure, although one missed dose on rare occasions is unlikely to cause any harm.

It is not an easy task for everyone to remember to take the correct dose at the same time each day. If this is a problem it may be helpful to set aside the daily dosage so a check can be made at the end of each day or to use a special drug wallet, which can be bought through a pharmacy.

If you are likely to be away from home occasionally, missing a dose can be avoided by carrying a spare set of medication to cover unexpected circumstances.

When travelling on holiday's abroad it is wise to take a sufficient supply of medication to cover the period away from home. Anti-epileptic drugs are sold under different trade names in other countries and are not always easily identifiable. However, the generic name is the same in all countries.

Carry a copy of your prescription also, but if medication is lost it will generally need to be prescribed by a doctor in that country, most countries will not permit dispensing on foreign prescriptions.

What is the right amount of drugs for me?

The most effective amount for controlling seizures varies from person to person. People with newly diagnosed epilepsy should be treated with one drug at a time and the effectiveness of the drug treatment should be closely monitored and the drug dose altered as appropriate, in order to achieve complete control of the appropriate and accurate treatment with one drug, a combination of drugs may be tried. However, the drug regime should be kept as simple as possible so as to minimise side effects and encourage compliance.

Do drugs for epilepsy have side effects?

Anti-epileptic drugs are not addictive but they may sometimes have side effects. As these drugs act on the brain, drowsiness, sedation, nausea and unsteadiness may occur. Sometimes this occurs when the drug is taken initially and normally wears off. These side effects may also be experienced if the dose is too high. Persistent unwelcome effects should be brought to the attention of the doctor.

Chronic side effects may be experienced with some drugs when taken over a prolonged period. However these effects can be minimised e.g. good dental hygiene can help swollen gums which can be a side effect of the prolonged use of phenytoin.

Pregnant women need particular care, and ideally medication should be reviewed before the pregnancy begins.

UNDER NO CIRCUMSTANCES SHOULD A PERSON STOP TAKING ANTI-EPILEPTIC MEDICATION ABRUPTLY WITHOUT SEEKING MEDICAL ADVICE. TO DO SO COULD PRECIPITATE WITHDRAWAL SEIZURES AND COULD BE DANGEROUS.

Will I need to take drugs for a lifetime?

For some people the answer is "yes". However, many people, particularly some children who grow out of the tendency to have seizures, can have their medication withdrawn after a period of (two years perhaps) being seizure-free. Withdrawal of medication should be done gradually and under the supervision of a competent doctor. In many cases this can be done successfully and the seizures do not recur but unfortunately there is no way at present of predicting accurately those in whom the seizures will return.

Precautions with Medication

Most children like to copy adults and may be tempted to copy a parent who takes tablets every day.

It is very important that all medication be kept out of the reach of children.

Avoid carrying tablets in glass bottles as these may break during a seizure. Most pharmacists now supply plastic containers.

Alcohol can interfere with the effectiveness of medication and if consumed should only be taken in moderate amounts.

Other Treatments for Epilepsy

Surgery

May be considered when seizures are not responding to medication. In general, people with resistant partial seizures are more likely candidates for epilepsy surgery than people who have generalised seizures. If the seizures are found to arise only from a single small part of the brain then this part may be removed to control the epilepsy.

However, anyone who is being considered for epilepsy surgery will have to undergo extensive investigations including EEG Video Telemetry, brain scans and special psychological tests before the surgery is performed.

Complementary Treatments

Therapies such as hypnosis, acupuncture, herbal remedies are not recommended, as suitable treatments for epilepsy and it would be unwise to substitute them for medication.

However, some people find that they can help to control the frequency of their seizures by using stress reduction techniques to alleviate anxiety, which can provoke seizures. Sleep deprivation is another common trigger of seizures so getting sufficient and regular sleep can help.

Avoid specific triggers like flashing lights in the case of people with photosensitive epilepsy can also help to reduce or control seizures.