



epilepsy

Epilepsy and Drug Therapy

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Medication for epilepsy

The standard treatment for epilepsy is the regular use of one or more chemical substances called anti-epileptic or anti-convulsant drugs/medication.

Ideally you should take as little medication as possible while maintaining seizure control.

Drug options

In recent years new developments have made more specific drugs available through ongoing research internationally. This does not mean that older drugs have become obsolete. In fact, newer drugs may not be suitable or appropriate for you.

Each drug has two names: (1) The generic or chemical name such as carbamazepine and (2) the trade name such as Tegretol which is given by the manufacturer. It is helpful to know the generic name of your drugs, especially when travelling internationally.

Drug choices

The table below contains information about the most commonly used anti-epileptic drugs. This is only a summary and by no means a full description of the drugs.

It is essential to always discuss your medication needs and queries with your doctor. Special consideration must be given regarding drugs for children with epilepsy since the effects of medication may differ from adults.

As some drugs have proven to be harmful to your unborn child (particularly valproate) it is advisable for a woman to discuss her individual situation with her doctor prior to becoming pregnant. This will allow her to assess potential risks and options in good time.

Drug interactions

When you use more than one type of medication the drugs may influence each other and change their effect. It is essential to tell your doctor about any other drugs you are taking when discussing potential treatment options (even over-the-counter medication).

The interaction between oral contraceptives and anti-epileptic medication (particularly carbamazepine, phenobarbitone and phenytoin) may reduce the effectiveness of the contraception resulting in unplanned pregnancy. Women with epilepsy should thus obtain specific medical advice and information about effective contraception.

Alcohol and recreational drugs taken in combination with anti-epileptic medication poses a problem and is best avoided.

A balanced diet with adequate nutrients and sufficient daily water intake is advised for optimal drug absorption.

Team work

Cooperation between you and your doctor is essential to establish optimum control of your seizures (epilepsy). Your doctor will be able to prescribe medication more precisely if you or a family member can accurately describe your seizures and the effect of medication.

It is important to take your medication exactly as prescribed. Treatment compliance is a major factor in the overall results that can be achieved.

Your pharmacist is also able to assist with information and advice about your medication.

Drug	Epilepsy/seizure type	Side effects
Carbamazepine (Tegretol, Degranol)	Simple and complex partial seizures, generalised tonic-clonic seizures.	Dose related: Nausea, double vision, unsteadiness. Allergic: Rash, reduced white blood cells count, increased appetite (rarely), no obvious effect on concentration, memory or behaviour.
Clobazam (Frisium)	"Add-on" in tonic-clonic, myoclonic and partial epilepsies. Effective in catamenial epilepsy (menstrual seizures).	Dose related: Drowsiness and lethargy. Drug loses effect over time despite increasing dosage.
Clonazepam (Rivotril, Clonopil)	Second or third choice for myoclonic seizures. Effective "add-on" for tonic-clonic and absence seizures. May be used in status epilepticus.	Dose related: Drowsiness, lethargy, drooling and hyperactivity in children. Drug loses effect over time. May cause inflammation of the veins.
Diazepam (Valium)	Drug of choice in status epilepticus (rectally or intravenously). Rarely used in regularly in tablet form.	Dose related: Drowsiness, lethargy, drooling and hyperactivity in children.
Ethosuximide (Zarontin)	First or second choice for typical absence seizures. May be effective in myoclonic seizures. Not effective in generalised tonic-clonic seizures.	Dose related: Drowsiness, nausea, vomiting, headache, irritability. Allergic: Rashes.
Gabapentin (Neurontin)	"Add-on therapy in partial seizures.	Dose related: Drowsiness, lethargy, nausea.
Lamotrigine (Lamictin)	"Add-on" and (in patients over 12 years) monotherapy in generalised tonic-clonic seizures (possible second choice after sodium valproate). Effective in absences with myoclonic seizures and partial seizures.	Dose related: Sedation, unsteadiness and possibly worsening of seizures. Allergic: Rashes may occur in 10% of patients, particularly if sodium valproate is taken simultaneously. To avoid rashes the drug must be introduced very gradually.
Oxcarbazepine (Trileptal)	Primary generalised tonic-clonic seizures and partial seizures.	Similar to carbamazepine, but less severe.
Phenobarbitone (Phenobarbital, Luminal, Gardenal)	Effective in generalised tonic-clonic, myoclonic and partial seizures. Effective in status epilepticus.	Dose related: Drowsiness, lethargy, unsteadiness. Chronic use: Tolerance and impairment of concentration and memory, slowness in activities. Withdrawal seizures if discontinued too quickly.
Phenytoin (Epanutin, Dilantin)	Second or third choice in generalised tonic-clonic seizures. Effective in partial and myoclonic seizures. Drug of choice in status epilepticus.	Dose related: Nausea, vomiting, unsteadiness, slurred speech. Allergic: Rash, hepatitis (inflammation of the liver), swelling of lymph glands. Chronic use: Gum, swelling, acne, hairiness (face and body), folate deficiency, involuntary movements, rickets.
Sodium valproate (Epilem)	First choice in primary generalised tonic-clonic seizures, typical absence, atonic and myoclonic seizures and photosensitive epilepsy. Effective in partial seizures (second choice after carbamazepine).	Dose related: Tremor, sedation, restlessness, increased appetite. Allergic: Stomach irritation, inflammation of liver and pancreas. Chronic use: Hair loss (usually transient), weight gain, low platelets in blood (may cause excessive bleeding if cut). Should not be taken during pregnancy.
Topiramate (Topamax)	Prescribed for partial seizures with or without secondarily generalised seizures, inadequately controlled by conventional first-line drugs.	Dose related: Drowsiness. Loss of appetite and weight may occur.
Valproic acid (Convulex)	Similar to sodium valproate.	Similar to sodium valproate.