## Modern aspects of epilepsy treatment L.O. Kolupaeva (LLC "Eliseeva Methodological Center", Moscow, Russia)

Epilepsy is a disorder of the activity of the brain, which consists in the fact that the balance between excitation and inhibition in the nerve cells of the brain is disturbed in the direction of the predominance of excitement. This is manifested by epileptic seizures and impaired brain function in the form of impaired memory, speech, learning ability, mood and general performance. Epilepsy is a heterogeneous condition with a chronic progressive course and, as a rule, a high level of disability.

In Russia, the disease occurs with a frequency of 1.1 to 8.9 per 1000 people. The risk of occurrence depends on age, most often children under 15 years old and people over 65 years old are ill.

The question of the etiology of epilepsy is very complex. There may be hereditary burden and organic brain damage at different periods of life. It has been established that the trigger mechanism is the cornerstone of the occurrence of epileptic seizures. For the onset of the disease, the formation of the epileptic system is necessary.

The International Classification of Epilepsy and Epileptic Symptoms was adopted in 1989. This classification is based on two principles. If epileptic discharges originate in a specific area of the cortex (epileptic focus), then seizures and epilepsy are called focal. If there are no signs of an epileptic focus, then epilepsy is called generalized.

The innate properties of the brain become the cause of idiopathic epilepsy, if it is possible to establish the cause, the epilepsy is called symptomatic.

The modern approach to the problem of epilepsy provides for the solution of a wide range of issues, the main of which is the achievement of the maximum therapeutic effect. Social adaptation, management tactics and issues of the quality of life of a patient with epilepsy are of no less importance.

In the treatment of epilepsy, anticonvulsant (antiepileptic) drugs are mainly used, therapy with which is carried out continuously for several years, and sometimes for the entire life of the patient. Anticonvulsants are divided into: a) drugs with a stabilizing effect on excitable cell membranes; b) drugs that change the functional activity of neurons. Of the neurotransmitters that are targets of anticonvulsants, the main one is gamma-aminobutyric acid (GABA).

Pharmacotherapy should be started with the first-line drug of choice, and the choice depends on the form of epilepsy and the type of seizure.

For generalized epilepsy, the drugs of choice are valproic acid (depakin, konvuleks, convulsofin), for partial epilepsy - carbamazepine and valproate.

Table 1

Drugs of choice based on seizure type

Seizure type	Drugs	Drugs
	1st row	2nd row
Partial	Carbamazepine	Vigabatrin
- simple	Valproate, Phenytoin	Clobazam
- complex	Valproate	Lamotrigine
- secondary generalized		Acetazolamide
		Phenobarbital
Generalized	Valproate	Vigabatrin
- tonic-clonic	Carbamazepine	Clobazam
- tonic	Phenytoin	Phenobarbital
- clonic	Valproate	Acetazolamide
- typical absences	Ethosuximide	Clonazepam, Clobazam
		Phenobarbital
Atypical absences	Valproate	Phenobarbital
- atonic		Acetazolamide
- tonic		Clonazepam
- myoclonic		

Drugs of choice for partial epilepsy

table 2

Acting substance	A drug	Daily dose for adults	Indications	Side effects
Carbamazepine	Tegretol Finlepsin Timonil Stazepin	400-1200 mg in 1-3 doses	Focal and generalized seizures. Ineffective for absences	Drowsiness, nausea, diplopia, stagger
Phenytoin	Diphenin Dilatin Hydantoin Fenidan	150-300 mg in 1-2 receptions	Focal and generalized seizures. Ineffective for absences	Drowsiness, violation coordination and speech. Swelling gums, hair growth, acne.
Derivatives valproic acid	Depakine Konvulex Orfiril Ergenil	600-1800 mg in 1-3 doses	Focal and generalized seizures, as well as absences.	Rarely - sleep- rainstorm, tremor, bulimia. Hair loss,
Lamotrigine	Lamictal	100-400 mg in 1-2 receptions	Focal and generalized seizures, including number a second time generalized	Dizziness, rash
Topiramate	Topamax	200-400 mg in 2 steps	Focal and generalized seizures	

With careful selection of the dose, it is possible to effectively treat epilepsy using a single anticonvulsant. Polytherapy is advisable after at least two consecutive attempts to use drugs in monotherapy mode.

In the complex therapy of epilepsy, a potentially important a place have non-drug methods of influence: diet therapy, reflexology, herbal medicine, therapeutic exercises, psychotherapy, ketogenic diet.

A diet that is high in fat and low in protein and carbohydrates is called ketogenic. It is used to treat drug-resistant

drug treatment of epileptic seizures. The physiological basis of the ketogenic diet is the creation in the body of conditions similar to those observed during prolonged fasting. This diet can be used from one year of age.

Despite the wide range of modern antiepileptic drugs with which it is possible to achieve a stable concentration of the drug in the plasma, there is no toxic effect of these drugs on the liver, they do not affect memory, concentration, mood, drugs of the old generation such as phenobarbital, benzonal are prescribed (which have many side effects ).

With the help of ART, I select the most optimal anticonvulsant drug and its dose for the patient, be sure to test the level of psychological stress, toxic slagging of the mesenchyme, the state of the immune system, the presence of HPN, and false polarity.

Based on these indicators, I select OBR and BPS, choose an induction program (if indicated), prescribe homeopathic remedies, conduct a resonant frequency therapy. Thanks to this we achieve harmonization organism, improvement psychoemotional state, relieving depression, increasing to a great performance, which in extent helps to better social adaptation of the patient.

Conclusion: using the ART method you can:

- select the optimal anticonvulsant drugs;
- taking into account the individual characteristics of the organism, create OBR and BDS preparations;
- to achieve significantly better social adaptation of the patient.

## Literature

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L.O. Kolupaeva Modern aspects of epilepsy treatment // XII

Pp. 189-193