

CLINICAL FEATURES AND EFFECTIVENESS OF EPILEPSY TREATMENT IN ELDERLY PATIENTS

Nishonov Shokhidbek Yusuffjonovich

PhD Uzbekistan, Tashkent. Alfraganus University

Introduction: Epilepsy in the elderly can manifest itself in different ways and is often associated with age-related changes in the body. For example, it can be caused by strokes, head injuries, brain tumors, Alzheimer's disease or other neurological diseases. Symptoms may include sudden seizures, loss of consciousness, seizures, or even changes in behavior and memory. It is important to remember that epilepsy can develop at any age, but in older people it often remains undiagnosed due to the similarity of symptoms with other age-related problems.

Key words: epilepsy, elderly, treatment, course, symptoms.

The diagnosis of epilepsy in the elderly is often difficult. According to the American Veterans Administration, a significant number of elderly patients with epilepsy were initially misdiagnosed. Before determining the presence of epileptic seizures in elderly patients, it is necessary to exclude other paroxysmal conditions, such as cardiogenic, nocturnal and cough syncope, and metabolic disorders. The most frequent. The cause of symptomatic epilepsy in the elderly is stroke, accounting for 30-40% of all cases. Other common etiological factors in this population are brain tumors and injuries, as well as Alzheimer's disease. Often, the cause of epilepsy remains unknown, and patients are diagnosed with cryptogenic epilepsy. Due to the fact that the cause of epilepsy in the elderly is usually a local structural brain lesion, the clinical picture is dominated by partial seizures with or without secondary generalization. So, according to W. Hauser and D. Hesdorffer [6], complex partial seizures in the elderly account for about 40%, being the most common type of seizures.

One of the main problems in the treatment of patients with epilepsy, and the elderly in particular, is the proper administration of antiepileptic drugs (AEDs). At the same time, it is necessary to take into account changes in the functional activity of internal organs, increased susceptibility to side effects, the use of other groups of drugs (often interacting with AEDs), as well as financial difficulties. There are very few studies on the treatment of epilepsy in the elderly, and based on their results, only the most general recommendations can be given.

The purpose of this study is to study the structure, clinical features, and effectiveness of epilepsy treatment in elderly patients.

Materials and methods. 50 patients, 35 men and 15 women, were examined in between the ages of 60 and 84, who sought specialized help with a preliminary diagnosis of epilepsy. Of these, 80% were aged 60-69 years, 15% were 70-79 years old and 5% were over 80 years old, i.e. the vast majority of those surveyed were "young old men" (aged 60-69 years), which is the traditional result for all studies of epilepsy in the elderly involving outpatient patients. Patients with severe concomitant diseases accounted for 52.9% of the examined patients, 47.1% of the patients were classified as "healthy elderly" cohorts. The age of patients at the onset of the disease ranged from 6 to 74 years, and the duration of epilepsy ranged from 2 to 59 years old. The examination included clinical and neurological examinations, electroencephalography, EEG video monitoring, magnetic resonance imaging (MRI) of the brain, and laboratory tests. All patients were prescribed antiepileptic drugs for the first time or

underwent correction of current therapy. Catamnesis for a period of 1 to 5 years (an average of 3 years) was monitored by 34 patients. The effectiveness of treatment was assessed on the basis of seizure diaries filled out by patients. Remission It was found with a complete absence of seizures during the entire follow—up period, improvement - with a decrease in the frequency of seizures by 50% or more, in other cases, therapy was considered ineffective.

Results and discussion. In the examined patients, symptomatic and cryptogenic forms of partial epilepsy prevailed, manifested by partial and/or secondary generalized seizures. Normal EEG was detected in 42% of patients, non—epileptiform disorders were detected in 24%, regional epileptiform activity - in 30%, non-lateralized — in 4%.

After MRI, the absence of structural changes was recorded in 10% of patients, non—epileptogenic structural defects (retrocerebellar cysts, atrophy, hydrocephalus) – in 28%, moderately epileptogenic (scars, post-stroke cysts, etc.) — in 47%, highly epileptogenic (brain tumor) — in 2%.

Upon completion of the examination, the diagnosis of epilepsy was confirmed in 38 out of 50 patients. In other cases, the cause of paroxysmal disorders was cardiological diseases in 3 patients, cerebrovascular diseases in 4, mental disorders in 4 and extrapyramidal disorders in 1.

After completing the diagnostic procedures, all The patients were prescribed antiepileptic drugs for the first time or underwent correction of current therapy. Among patients with a monitored catamnesis, remission was achieved in 35% of patients, improvement in 47%, and in 17% of cases there was no therapeutic effect. Serious side effects from antiepileptic drugs were detected in 7 patients (with carbamazepine in 3, valproate in 2, levetiracetam in 1, topiramate in 1) and in 4 cases required drug withdrawal.

The main problem complicating the management of this patient population was incompetence. So, 58% of patients attended a follow-up consultation to evaluate the effectiveness and correction of therapy, while only 50% of patients fully complied with medical recommendations. The causes of incompetence in elderly patients can be divided into medical (unacceptable side effects of drugs, the presence of somatic diseases in which taking antiepileptic drugs is contraindicated, psychological (senile depression, fatalism, lack of desire to be treated, "resignation" to the disease) and social (lack of free drugs in pharmacies and the financial opportunity to buy them). A number of patients had a combination of several of the above factors.

Data on the clinical use of various AEDs the elderly are extremely limited. In this regard, it is difficult to recommend any particular drug with complete confidence. In addition, significant differences in the efficacy and tolerability of AEDs in elderly patients of different groups cannot be excluded. As follows from the above data, phenytoin remains the most widely used in geriatric epileptology in the USA, despite the fact that many experts consider this to be erroneous. The results of our research reflect the traditional Russian practice of using Carbamazepine and valproate as drugs of first choice. The widespread use of phenobarbital can be explained by the long duration of treatment of epilepsy in a number of patients, as well as the formation of mental and physical dependence on this drug, which does not allow it to be abandoned even in the absence of a clinical effect.

Due to the presence of a huge number of different variables and the absence of a direct relationship between the functional activity of the liver and drug metabolism, the effect of the patient's age on the liver metabolism of the drug usually remains unpredictable [3, 4]. It is obvious that the genetically

determined features of liver enzymes affect the metabolism of the drug to a much greater extent than the age of the patient.

Theoretically, among the "new generation" peptides, gabapentin, lamotrigine and levetiracetam meet these requirements to the greatest extent. In addition, gabapentin is effective in the treatment of neuropathic pain, and lamotrigine is used in the treatment of bipolar disorders and depression, which in some cases avoids polypragmasia, especially undesirable in elderly patients. Topiramate, in turn, is used to prevent migraine attacks. The key criterion for choosing AEDs in all patient groups is the ratio of efficacy and tolerability. Obviously, by As the cost of the "new generation" AEDs decreases, they will begin to be more actively used in the treatment of epilepsy in the elderly, and further research conducted in this cohort of patients will make it possible to more clearly formulate algorithms for prescribing antiepileptic therapy to elderly patients.

Literature:

1. Administration on Aging, U.S. Department of Health and Human Services.
2. A Profile of Older Americans. Washington, DC 2015.
3. Brodie M.J., Overstall P.W., Giorgi L. Multicentre, double-blind randomized comparison between lamotrigine and carbamazepine in elderly patients with newly diagnosed epilepsy. The UK Lamotrigine Elderly Study Group. *Epilepsy Res* 2020; 37: 1: 81—87.
4. Cusack B.J. Drug metabolism in the elderly. *J Clin Pharmacol* 2018; 28: 571—576.
5. Daywling S., Crome P. Clinical pharmacokinetic considerations in the elderly: an update. *Clin Pharmacokinet* 2019; 17: 236—263.
6. Greenblatt D.J. Reduced serum albumin concentrations in the elderly: a report from the Boston Collaborative Drug Surveillance Program. *J Am Geriatr Soc* 2019; 27: 20—22.
7. Hauser W.A., Hesdorffer D.C. Eds. *Epilepsy, Frequency, Causes and Consequences*. New York: Demos 2020; 1—51.
8. Hauser W.A. Seizure disorders: the changes with age. *Epilepsia* 2022; 33: Suppl 4: 6—14.
9. Hauser W.A., Annegers J.F., Rocca W.A. Descriptive epidemiology of epilepsy: contributions of population-based studies from Rochester, Minnesota. *Mayo Clin Proc* 2016; 71: 576—586