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ASSESSMENT OF THE INFLUENCE OF MODERN ANTI-EPILEPTIC DRUGS ON THE QUALITY OF LIFE OF PATIENTS WITH EPILEPSY

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Epilepsy is a chronic brain disease characterized by recurrent, unprovoked attacks of motor, sensory, or mental dysfunction resulting from excessive neuronal discharge in the gray matter of the cerebral cortex (1, 3). From this definition it follows that no other clinical (mental changes) or electroencephalographic (epileptiform activity) signs alone can be the basis for a diagnosis of epilepsy (4, 5). Epilepsy does not include single seizures, regardless of their clinical manifestations. Only repeated seizures are the basis for a diagnosis of epilepsy. By definition, febrile convulsions, as well as convulsions that occur during process damage to the brain (for example, with encephalitis, subdural hematoma, acute cerebrovascular accident5, etc.) are not epilepsy - epilepsy includes spontaneous, unprovoked seizures (with the exception of reflex forms) . Idiopathic forms of epilepsy have characteristic etiological, clinical and prognostic parameters clearly formulated in the specialized literature, with known or possible genetic predetermination, in which a complete clinical or paraclinical study does not reveal structural damage to the brain and the condition of another known disease (2, 3).

Cryptogenic - presumably symptomatic forms of epilepsy or syndromes, the cause of which is not clear. Up to 60-70% of all cases of epilepsy are cryptogenic (Zenkov L.R.).

Currently, a number of forms of epilepsy and epileptic syndromes that are not included in the International Classification have been described: absence seizures in infants, absence epilepsy in adults, autosomal dominant frontal epilepsy with nocturnal paroxysms, familial benign temporal lobe epilepsy, etc. (1).

The prevalence of epilepsy in the population is high and reaches 1-2% (Zenkov L.R.).

The treatment strategy for epilepsy has currently undergone significant changes. The modern approach to the problem of treating epilepsy involves solving a number of issues related not only to achieving the maximum therapeutic effect, but also to the problems of adequate functioning of patients in society: education, choice of profession, employment, starting a family (5). Currently, this definition has found its echo in the concept of “Quality of Life”. According to the WHO definition, QOL is an individual's perception of their position in life in the context of the culture and value system in which they live, in accordance with their goals, expectations, standards and concerns.

Purpose of the study: Improving the quality of life of patients with epilepsy based on the rational use of modern antiepileptic drugs.

Materials and methods: The study was conducted at the ASMI clinics and neurological departments of the regional hospital from 2021 to 2023.

The study included 45 patients aged from 14 to 65 years (average age 30.66+1.16 years) with disease duration from several months to 48 years (average 8.43+0.76 years), suffering from symptomatic and cryptogenic focal epilepsy. The diagnosis was established in accordance with the

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International Classification of Epilepsy, Epileptic Syndromes and Similar Diseases (New Delhi, 1989).

Results and discussions: The majority of patients (56.44%) were diagnosed with cryptogenic (unknown etiology, presumably symptomatic) focal epilepsy, the remaining patients (43.56%) were diagnosed with symptomatic focal epilepsy (with a known etiology).

Depending on the location of the source of epileptogenesis in the cerebral cortex, frontal epilepsy was diagnosed in 38.22% of patients, temporal epilepsy in 26.67%, occipital in 0.44%, multifocal in 0.89%. In another 33.78% of patients, the localized form of the disease could not be established.

The age of onset of the disease among the examined patients ranged from 4 to 55 years. The onset of the disease before the age of 10 years was noted in 16% of patients, in the age intervals of 11-20 years - in 44.44%, 21-30 years - in 14.67%, 31-40 years - in 12.89%, 41 -50 years - for 8.89%, more than 50 years - for 3.11%.

Thus, in 60.44% the disease debuted before the age of 20 years, with the peak incidence occurring in the second decade of life (44.4%).

At the time of presentation, the majority of patients (72%) had received previous antiepileptic therapy for a long time. The reason for treatment, as a rule, was the ineffectiveness of treatment, as well as side effects of therapy, which significantly affect the quality of life of patients, their psycho-emotional state and social functioning. 28% of patients did not receive anticonvulsant therapy. Analysis of previous antiepileptic therapy showed that 59.11% of patients initially received monotherapy treatment: 38.22% of them with first-line antiepileptic drugs (AED-1), 20.89% with second-line drugs of choice (AED-2) .Duotherapy with AEP-1 and AEP-2 in various combinations was received by 9.33% of patients, treatment with three or more - 3.56% of patients.

After the necessary examination and diagnosis, all patients underwent correction of previously received treatment or were prescribed therapy for the first time in accordance with ILAE recommendations. The dose of drugs was increased gradually in order to minimize the risk of side effects of therapy. Initially, patients were prescribed a minimum therapeutic dose, which was subsequently increased under the control of effectiveness and tolerability. When gradually replacing therapy, we adhered to the tactic of prescribing a second AED until the therapeutic dose was reached, followed by discontinuation of the initially used drug. This approach allows for a more correct interpretation of the clinical effect. The final assessment of the effectiveness of therapy was carried out no earlier than 6 months of treatment, preliminary - 2-3 months, depending on the rate of AED titration, based on an analysis of diaries of seizures, filled out independently by patients. We designated the complete absence of attacks during treatment throughout the entire observation period as “remission.” We defined a reduction in seizure frequency by 50% or more as “improvement.” By no effect we meant maintaining the number of attacks at the same level, as well as reducing their number by less than 50%. An increase in the frequency of attacks was regarded by us as “deterioration”.

Thus, VPA, CBZ and LEV significantly more often led to complete relief from SHSP than from partial seizures ($p < 0.05$). TPM and OKZ were equally highly effective in different types of seizures ($P>0.05$). All drugs equally led to a complete reduction of VGSP ($p>0.05$). However, a

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relatively higher frequency of ineffectiveness against VGSP was recorded when using VPA compared with CBZ ($p<0.01$), TPM ($p<0.001$).

When analyzing the effectiveness of drugs against partial seizures, a significantly higher frequency of ineffectiveness of LEV and VPA was found compared to CBZ and TPM ($p <0.05$). Complete relief of partial seizures was observed significantly more often during treatment with TPM compared to VPA, CBZ, LEV ($p<0.05$) and in the OKZ group compared to CBZ ($0<0.05$). No other statistically significant differences were found.

The QOL study was carried out in patients with symptomatic and cryptogenic (presumably symptomatic) focal epilepsy within a period of 6 to 12 months (average 8+2.5 months) from the start of monotherapy, including patients who stopped taking the drug within these periods before discontinuation of therapy.

QOL was studied using the QOLIE-31 questionnaire (Quality of life in epilepsy, version 1.0). The questionnaire allows you to quantify in points seven main areas of quality of life of patients with epilepsy: “fear of seizures”, “general quality of life”, “emotional well-being”, “energy/fatigue”, “cognitive functions”, “effect of drugs”, “social functioning” and calculate final QOL score When analyzing the test results using the QOLIE-31 questionnaire, we conditionally adopted a score according to which a QOL of less than 30 points corresponds to a very low QOL, from 30 to 39 - low, from 40 to 49 - average, from 50 to 59— good, over 60 points - very good QoL.

When comparing the final indicators of the quality of life of patients with epilepsy receiving treatment with various AEDs, the largest number of patients who rated their quality of life as “good” and “high” was noted in the groups of new AEDs: OKZ - 75%, LEV - 72%, TPM - 61.4 %. In patients receiving monotherapy with CBZ and VPA, the frequency of “good” and “high” assessments of the final QoL was 52% and 49.25%, respectively. The vector of increasing frequency of “low” ratings was directed as follows: OKZ - 4.17%, LEV - 8%, TPM - 10.53%, KBZ - 16%, VPA - 16.42%. It is worth noting that there were no “new” AEDs in any of the groups.

When comparing the final indicators of QOL in the groups of “new” AEDs, “low” scores were significantly more often observed in patients receiving TPM and LEV treatment compared to the OKZ group ($p<0.001$ and $p<0.05$, respectively).

Thus, the results of testing patients with focal epilepsy receiving monotherapy with various modern AEDs using the QOLIE-31 questionnaire showed that the majority of them rated their quality of life as “good” and “high” (from 49% to 75% in different groups of drugs) . The data obtained should probably be considered as an indicator of the high rehabilitation potential of patients with epilepsy, including in social terms, and indicates that outside of attacks and with good tolerance of treatment, many of them feel like healthy people. There is no doubt that the key to the success of therapy is the timely administration of adequate monotherapy, taking into account the individual potential for effectiveness and side effects.

Literature:

1. Берно-Бекуллер И.В. Качество жизни больных эпилепсией — пациентов диспансерного учета // Обозрение психиатрии и медицинской психологии / Санкт-Петербургский НИ психоневрологический институт им. В.М. Бехтерева (СПб). - 2005. - № 2 . - С. 16-18.
2. Вассерман Л.И., Громов С.А., Михайлов В.А., Лынник С.Д., Флерова И.Л. Концепции реабилитации и качества исизни: преемственность и различия в современных подходах //

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Психосоциальная реабилитация и качество жизни. Сборник научных трудов. - Том 137. - СПб.: СанктПетербургский научно-исследовательских психоневрологических институт им. В.М. Бехтерева, 2001. - С. 103 - 115.

3. Гехт А.Б. Качество жизни больных эпилепсией // Сб. Международная конференция «Эпилепсия - диагностика, лечение, социальные аспекты». М. - 2 0 0 5 . - С . 120-124. 10. Глухова Л.Ю., Мухин К.Ю., Петрухин А.С., Миронов М.Б. Топамакс в лечении симптоматической лобной эпилепсии // Журнал неврологии и психиатрии. - 2003. - Т. 103Х12. - С. 51-52.
4. Абдукадирова Д. Т. Сравнительный анализ выраженности когнитивных нарушений при эпилепсии различной локализации. Журнал «Неврология» Ташкент 2013
5. Громов С.А., Харитонов Р.А., Михайлов В.А., Липатова Л.В., Зайцев Д.Е., Яковенко В.В., Панюкова Т.Е., Коровина С.А. Топамакс в системе медикаментозного лечения эпилепсии // Журнал неврологии и психиатрии. — 2004. - № 30. - С.38-41.