

наростаючою соціально-трудовою дезадаптацією та інвалідизацією, алкоголізмом, медикаментозною залежністю, проблемами в колективі, сім'ї, конфліктом з законом, суїцидальні спроби. У зв'язку з цим є необхідність подальшого диспансерно-поліклінічного спостереження і проведення довготривалих лікувально-профілактичних заходів.

Профілактика психіатричних розладів при катастрофах є складною справою, оскільки екстремальні ситуації виникають зазвичай раптово і зненацька.

Велике значення має можливе прогнозування екстремальних ситуацій. Необхідно, щоб всі медичні працівники були знайомі з основними положеннями медицини катастроф, і тоді відповідно підготовлені професіонали

зможуть відразу приступити до необхідних лікувально-профілактичних заходів.

## Список використаної літератури

1. Гриневич С.Г., Лінський І.В. Поширеність психопатології і частота антропогенних катастроф в областях України // Укр. вісник психоневрологів. – 2005. – Т. 13, вип. 3. – С. 27–29.
2. Калінін А.Г., Поліванов І.А., Сідоров П.І. Психіатрія катастроф. Руководство по медицине катастроф. – Архангельск, 1999. – 239 с.
3. Жмуров В.А. Большая энциклопедия по психиатрии. 2-е изд. – М., 2012. – 315 с.
4. Румянцева Г.М. Медико-психологическая помощь пострадавшим при экологических катастрофах. – М.: ГНЦ социальной и судебной психиатрии им. В.П. Сербского, 2011. – 25 с.
5. Коханов В.П., Краснов В.Н. Психіатрія катастроф і екстремальних ситуацій. – М., 2008. – 448 с.
6. Краснов В.Н. Психіатрія катастроф і надзвичайних станів та її розвиток в останньому десятиріччі. – М., 2009.

### НЕКОТОРЫЕ ОСОБЕННОСТИ ПСИХИЧЕСКИХ НАРУШЕНИЙ В РЕЗУЛЬТАТЕ ЭКСТРЕМАЛЬНЫХ СИТУАЦИЙ

Е.П. Венгер, Ю.Б. Чолач

В этой работе авторы попытались осветить некоторые аспекты психических расстройств, возникающих в экстремальных ситуациях. В процессе исследования проблемы авторы рассмотрели вопросы патогенеза и этиологии психических расстройств. Также сосредоточено внимание на проблеме классификации, клинической картины и течения данных расстройств. Рассмотрены сравнительные возрастные особенности психических расстройств и их лечения, реабилитации и профилактики. Эти исследования позволяют систематизировать данные о психических расстройствах в результате чрезвычайных ситуаций и обеспечить эффективные методы лечения, реабилитации и профилактики данных заболеваний.

**Ключевые слова:** психические расстройства, экстремальные ситуации, этиология, патогенез, классификация, клиника, лечение, реабилитация и профилактика.

### SOME FEATURES OF THE PROBLEM OF MENTAL DISORDERS AS A RESULT OF EXTREME SITUATIONS

O. Venger, Yu. Cholach

In this work we tried to illuminate certain aspects of mental disorders that occur in extreme situations. In the process of research the problem we tried to illuminate the pathogenesis and etiology of mental disorders. Also focused on the problem of classification, clinical picture and flow data of disorders. Reviewed the comparative age features of mental disorders and their treatment, rehabilitation, and prevention. These studies allow to systematize data about mental disorders as a result of extreme situations and provide with effective methods of treatment, rehabilitation and prevention data disorders.

Some features of mental violated as a result of extreme situations - In this paper we have tried to highlight some aspects of mental disorders that occur in extreme situations. The research problems we have tried to highlight the pathogenesis and etiology of psychic disorders. Also focused on the problem of classification, clinical picture and course of these disorders. Was considered comparative age characteristics of mental disorders and their treatment, rehabilitation and prevention. These studies make it possible to organize data on mental disorders as a result of extreme situations and acquaint with effective treatment, rehabilitation and prevention of these disorders.

**Key words:** mental disorders, extreme situations, etiology, pathogenesis, classification, clinic, treatment, rehabilitation, and prevention.

616.89; 616.853

N.V. Sofilkanych, M.M. Oros, V.V. Luts, V.I. Smolanka

### EARLY EPILEPTIC ATTACKS IN PATIENTS AFTER STROKE AS AN IMPORTANT PREDICTOR OF THE COURSE OF THE DISEASE

Uzhhorod National University Mukatchiv Central District Hospital

The small clinical study provided data on the incidence of seizures (9.1% in ischemic and 16.6% - in hemorrhagic stroke), their prognostic significance and impact of 'early' seizures on stroke course and mortality depending on the mechanism of brain damage. These data help to improve diagnosis, patient management for both ischemic and hemorrhagic stroke. Correlation has been identified for early seizures developing in acute ischemic stroke, and pathogenetic mechanism of ischemic stroke (hemodynamic disorders, cardioembolic stroke, or combination of atherosclerotic stenosis with cardioembolic stroke). Early epileptic attacks are prognostically unfavorable factor for hemorrhagic stroke. Early seizures are developed in patients with large size (50 mm) ischemic lesion ( $p = 0.0001$ ; OR – 3.32; 95% CI: 1.74-6.32), as well as with the average hemorrhage ( $p = 0.0008$ ; OR – 2.66; 95% CI: 1.47-4.8). In ischemic stroke, the early attacks may be a marker of severe course, and correlate with high risk of recurrent stroke, thus requiring close medical care and prevention activities. To treat post-stroke symptomatic epilepsy, oxcarbazepine, levetiracetam, and lamotrigine could be recommended. Valproate and topiramate in this type of epileptic attacks should be considered as second-line drugs, considering their side effects.

**Key words:** epilepsy, stroke, «early» epileptic attack.

**Actuality:** symptomatic form is an important problem of epileptology because 20-30% of all patients with epilepsy suffer from this form of the disease. The causes of emerging symptomatic epilepsy are different in various age groups of patients. In children

and mature age the main cause is the consequence of cranial-cerebral trauma, brain tumor and inflammation processes in central nervous system. Among the most significant identified risk factors of epilepsy with late debut cerebral-vascular

pathology occurs in 40%. That's why it is recommended that all aged patients with first recovered epilepsy should undergo screening to reveal risk factors of vascular pathology and to choose proper therapy for its reducing [9]. Another important identified cause of epilepsy with late debut is dementia that accounts for 11 to 16% of cases [18]. The third significant cause of epilepsy in the aged is neurosurgical pathology, including cerebral tumors (4%) and cranial-cerebral injuries (from 1 to 3%). Most authors underline that epilepsy with late debut can be caused by neurosurgical interventions themselves in connection with hematomas, tumors and intracerebral blood flow [13]. C.Kellinghaus and his co-authors (2004) point out that it is difficult to diagnose epilepsy with late debut because of prevailing focal components (auras), automatisms, atypical absentias and one-sided attacks with developing postattack Todd paralysis. All this can be judged by the doctors as the nonepileptic genesis state, for example, psychomotor excitement, cortical and hemispherical infarctions [13]. From the other side A.Zaidi et al. (2000) showed that cardiovascular events can mimic the state that resembles epiattacks. In this case the patients are administered anticonvulsants, and the doctors erroneously conclude that there are pharmacoresistant attacks on the background of antiepileptic therapy. Among the states of vascular genesis which resemble epileptic attacks the authors mentioned bradycardia, hypotension vasovagal syncope, vasovagal reactions during intravenous injections, cardiac rhythm blockade carotid arteries palpation and carotid sinus irritation [29]. Therefore, when poststroke epilepsy (PSE) is diagnosed in old-aged patients for the first time complex cardiologic examination is recommended. It's also mentioned that the postattack confused consciousness in old-aged patients lasts much longer than in young patients and in children. Besides, diagnostic difficulties are connected with problems in interpretation of interattack by means in interictal EEG. Considering the abovementioned facts the problem of epilepsy with late debut is becoming actual in most developed countries because of existing demographic problems and aging population [1].

Investigations carried out in Norway showed that severe strokes are statistically important independent predictors (risk factors) of PIE. Nowadays American population example showed that over 20 thousand new attacks of epilepsy develop in Americans annually. These investigations were published in the journal «Epilepsia» in 2005 [19]. In one of the long-term prospect studies including over 500 patients it was shown that severe insults result in 5% increase of the risk of PIE development compared with moderate insults. However, the treatment in specialized insult units, primary insult debut age and geographical features did not statistically affect the risk of developing epilepsy in this investigation.

At the same time it was pointed out that thrombolysis in acute period of insult alongside with the application of modern neuroprotective preparations can play an important part in prevention of PSE. Therefore the scientists in many countries are greatly interested in the evaluation of insult treatment effect in its most acute and acute stages on the PSE development risk.

O.Camilo, L.B.Goldstein (2004). These authors showed a very great variability in PSE development frequency – from 2 to 33% in early poststroke period and from 3 to 67% in late postinsult period. But the average frequency of PIE development (according to the data obtained during mathematical

calculations) accounted for 2.4% and was higher in those cases when epileptic attacks developed during later periods after the insult. The authors pointed out that it was necessary to carry out many national investigations in order to understand PSE social aspects, its prevention and adequate therapy [7].

This can be explained by the peculiarity of long-term epileptogenesis in old-aged patients. On the other hand, in the available medical literature according to the data of investigation in Great Britain it was shown that epileptic patients with late debut (after 60 years) have an increased risk of developing stroke. On the basis of the analyzed data from the National Statistic Centre of general practitioners R.Tallis et al. (Geriatric Medicine Department of Manchester University) analyzed 4709 clinical cases of PIE in England and Wales (patients over 60) having no epilepsy in their family history. This study population included those individuals who have no symptoms of cerebrovascular pathology, brain injury, brain tumor, alcoholic or narcotic addiction, dementia in their family history, as well as those who have no indications of using antiepileptic preparations for any other cause. The average year of birth in this group was 1920. 2044 males and 2645 females were included in both groups (control and comparative). It was demonstrated that insult developed in 10% of patients with epilepsy compared with 4.4% individuals in the control group. In this case the absolute difference was 5.6%. The average risk of stroke development in the comparative group was 2.89% compared with 1.4% in patients having high level of cholesterol concentration, HDLP. The authors pointed out that patients who developed epileptic attacks in old age have a higher risk of developing stroke [12].

Analyzing the MRT data in patients with PIE M.E.Lancman et al. showed the highest risk of convulsive attacks after hemorrhagic strokes, cortical infarctions, as well as during insults with extensive damage of the brain (enveloping more than one part of it) [17]. A very important indication of PSE development risk is the development of epileptic status in acute and the most acute periods of stroke [25].

According to the works of Spanish scholars – ischemic insult is the most frequent (in 30-50% of cases) etiologic factor of epilepsy in patients over 60, while in those below 60 – only in 26% of cases (Martinez-Garcia FA, et al., 1998). Therefore a particular place is occupied by postischemic stroke epilepsy («poststroke» epilepsy) and epileptic attacks (EP) during the ischemic stroke acute period: epileptic attacks with «early onset» or «early» attacks.

Nevertheless, it would be wiser to admit (M.E.Lancman's rightness) that acute epileptic attacks appear more often during hemorrhagic than during ischemic insult. Acute epileptic attacks develop in 3.7% of all stroke cases; in 6.5% carotid infarctions, and in 10.2% hemorrhagic cases (hemorrhagic insult). (Faught E. et al., 1989; Kilpatrick C.J. et al., 1992; Weisberg L.A. et al., 1991; Milandre L. et al., 1992).

Most of the investigations mentioned above are devoted to the study of cliniconeurological peculiarities of patients, electrophysiological and structural morphological characteristics of postischemic foci which are the substrate of «poststroke» epileptic attacks. There is insufficient attention to pathogenetic clinical features, neurovisualizing data in patients with an epileptic attack during acute period of the insult («early» epileptic attack) which are usually considered together with «late» epileptic attacks.

Considering epileptic attacks frequency during ischemic stroke there are contradictions in literature. In case

of nondifferential approach to «early» and «late» epileptic attacks in patients with ischemic and hemorrhagic insult which is discussed in most investigations the frequency of epileptic attacks is from 0.4 to 43% (So A.L. et al., 1996; Arboix A. et al., 1997; Berges S. et al., 2000). The effect of vascular diseases risk factors on the development of epileptic attacks in case of ischemic insult was considered, according to the data in literature, only in general patients' groups with ischemic and hemorrhagic insult (Arboix A., Garcia-Eroles L., Reith J., Jorgensen H.S. et al., 1997). At this stage, as it was mentioned above, frequency, time and character of the attacks are not studied sufficiently. There is insufficient knowledge about the factors leading to the development of attacks and their prognostic effect on early mortality and epilepsy risk.

At present most countries of the world use classification G.Barolin, E.Scherzer (1962), who suggested differentiating epileptic attacks during cerebrovascular pathology depending on their onset with respect to the insult development [5]. Attacks-predictors (heralding) develop before insult in case of cerebrovascular disease (CVD) and very often they are indications of the past impairment of cerebral blood circulation (CBCI) or indicate about the so-called «dumb» insult which is not accompanied by the marked neurological deficit and is further diagnosed retrospectively according to the CT data. Early epileptic attacks occur during the first 7 days of insult development. Late attacks, or PIE mean that epileptic attacks will develop after 7 days or more after the insult [1, 4, 8, 15, 16, 25].

Prognostic «significance» of «early» attacks during the course of insult is not unanimous. Some investigators think: «early» attacks result in hospital mortality and are bad prognosis of insult (Spenser S.S., 1997; Kurash Pro.Ya., 2000).

It is not less important in clinical practice to study convulsive attacks caused by this or that factor. Convulsive attacks can be caused by the patient's diabetes mellitus (in case of hypoglycemia), as well as in patients with well-marked phenomena of dehydration. Alcoholism is a less important factor (Kurash O.Ya., 2000). As a rule, convulsive attacks in such cases result from an abrupt cancellation of alcohol or on the background of severe alcoholic intoxication.

The abovementioned facts called for the actuality of investigating «early» and «late» epileptic attacks (EA) risk on the basis of dynamic clinical examination of the patients with ischemic and hemorrhagic insult together with the study of cerebral dynamics indices of neurovisualized data. All this defined the aim of this study.

### The aim of the investigation

To study the effect of «early» epileptic attacks on the severity of insult course, its relapse risk and the fatal outcome based on catamnestic investigations.

To reveal clinic-neurological peculiarities, frequency and prognostic value of «early» attacks in patients with ischemic and hemorrhagic stroke.

To analyze the risk factors of epileptic attacks during the period of stroke depending on its character (ischemic, hemorrhagic).

### Methods and materials

We analyzed the family history data and the two-year catamnesis of 427 patients admitted to the vascular neurology

Department of Mukatchiv Central District Hospital where insult was diagnosed and confirmed. We studied patients both with ischemic insult where there were 373 patients and 54 patients with hemorrhagic insult.

### The result and their discussion

The selected group of patients were diagnosed according to their sex: 202 females and 220 males suffered from stroke. Patients were sex-distributed according to ischemic and hemorrhagic stroke. This distribution is given in Figure 1.

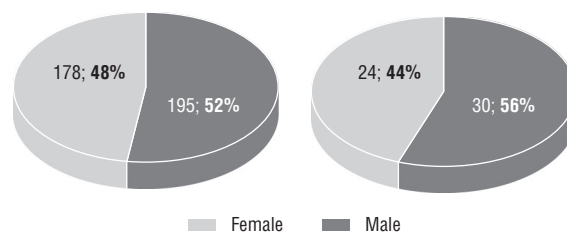


Figure 1. The patients' distribution according to sex in groups with ischemic and hemorrhagic stroke (p<0.01)

During one year catamnesis epileptic attack occurred in 39 (9.1%) individuals. Epileptic attacks dynamics in patients with stroke is given in Figure 2.

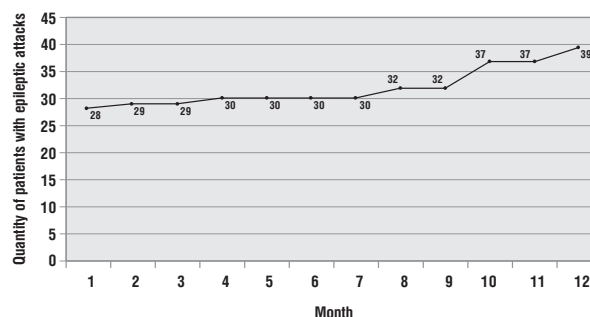


Figure 2. Epileptic attacks dynamics during one year after the stroke

During the analysis we revealed the difference between the frequency of epileptic attack in patients with ischemic and hemorrhagic stroke. Among 373 patients who had ischemic stroke epileptic attacks were fixed in 27 patients (7.2%), «early» epileptic attack being fixed in 19 (5.0%) patients. In patients who had hemorrhagic stroke epileptic attack were fixed in 12 (22.2%) individuals, in 9 (16.6%) «early» attacks being fixed. See Figure 3.

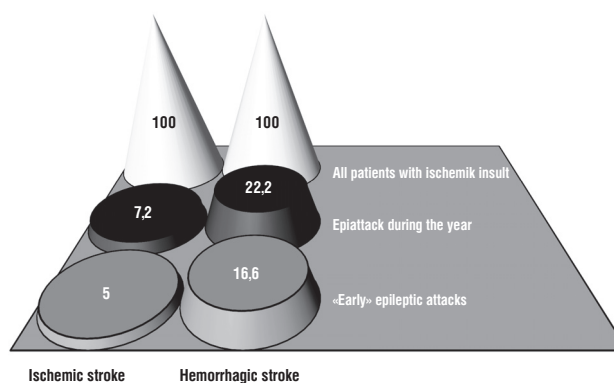


Figure 3. Distribution of the patients according to the type of stroke and epileptic attacks frequency (the data are given in %, p<0.05)

The degree of the marked neurologic deficit during the acute period of ischemic stroke (according to NIHSS scale) was considered to be medium severe (4-11 grades) ( $p = 0.0009$ ; OR – 2.64; 95% CI: 1.38-5.05), while the stroke that occurred in 60-69 age group ( $p = 0.0003$ ; OR – 5.12; 95% CI: 2.64-9.9). The degree of the marked neurologic deficit during the acute period of ischemic insult (according to NIHSS scale) was considered to be a severe neurological deficit (12 and more grades) ( $p = 0.0006$ ; OR – 3.08; 95% CI: 1.58-6.03), while the insult that occurred in 50-59 age group ( $p = 0.0000$ ; OR – 5.01; 95% CI: 2.76-9.07).

During the ischemic stroke patients with «early» attacks revealed the most marked risk factors of the insult development: cardiac fibrillation ( $p = 0.0001$ ; OR – 5.56; 95% CI: 2.9-10.65), myocardial infarction ( $p = 0.005$ ; OR – 3.77; 95% CI: 1.38-10.32) and diabetes mellitus ( $p = 0.0001$ ; OR – 5.38; 95% CI: 2.48-11.65). In case of hemorrhagic insult the most marked risk factors are diabetes mellitus ( $p = 0.0002$ ; OR – 2.9; 95% CI: 1.61-5.18) and alcoholism ( $p < 0.05$ ; OR – 2.17; 95% CI: 0.99-4.75).

«Early» epileptic attacks development is correlated with the degree of the neurological deficit, the size of the damaged area. «Early» attacks are developed in the patients with a large sized ischemic focus (over 50 mm) ( $p = 0.0001$ ; OR – 3.32; 95% CI: 1.74-6.32), as well as in cases of medium bleeding ( $p = 0.0008$ ; OR – 2.66; 95% CI: 1.47-4.8).

It's much harder to treat PSE compared with epilepsy treatment in young patients [14, 23]. It is connected with a greater risk of interactions between medicines, renal and hepatic dysfunction which require longer intervals of antiepileptic drugs administration compared with the patients of younger and medium age, cognitive impairments in elderly patients with concomitant Alzheimer disease, Parkinson disease, hypertonic multiinfarction encephalopathy, etc. which stimulate increased sensitivity and greater side effects of antiepileptic drugs [18]. Dose-depending side effects of antiepileptic preparations, such as vertigo, equilibrium disbalance, as well as preparation specific side effects, such as hyposodemia or tremor may be due to a higher concentration level of antiepileptic preparations in blood serum compared with that in younger patients [23]. Anticonvulsive preparations side effects may be due to the age of the patients, for example, AEP-associated osteoporosis risk increases, osteomalacia on the background of phenobarbital, phenitoin, permidon administration increases, too. In this case osteopenia and osteoporosis risk greatly increases during polytherapy compared with monotherapy. On the other hand there is very limited information about investigation of new anticonvulsants in elderly patients [18]. Thus in 2004 21435 war veterans in the USA (patients over 65 with epilepsy) were treated with phenobarbital and phenitoin [21], although both preparations cause a marked sedative effect and result in cognitive impairments and stimulate pharmacological interactions [26]. Phenitoin causes complicated dosing in patients of old-age groups because it has nonlinear side effects.

Elderly patients take a lot of preparations for both epilepsy and somatic diseases. Antiepileptic preparations may pharmacologically interact with other medicines. Minimal pharmacological interaction profile is described only for new antiepileptic preparations (gabapentin, levetiracetam) [27]. Both preparations are effective in case of focal epilepsy and

is excreted unchanged mostly through kidneys, its dosage depending on the renal function impairment. Somnolentia may also mimicrate the use of these preparations [18]. According to the latest studies only 25% of patients with epilepsy with late debut have generalised tonico-clonic attacks, 43% have only complex focal attacks, 32% have focal attacks which are very hard to diagnose in old-aged group, because they are underestimated by the patients, his relatives and neurologists.

Traditional antiepileptic preparations – carbamazepin, phenitoin, valproates are metabolized in the liver. Thus, carbamazepin and phenitoin which induce hepatic metabolism may decrease the effects of many medical preparations including chemotherapeutic glucocorticosteroids or varfarin. Valproates and lamotridgin inhibit hepatic metabolism, increase the risk of hepatic insufficiency, particularly on the background of hepatoduodenal zone insufficiency. Karbazepin greatly increases hyposodium risk which must be taken into consideration while treating patients with PSE who undergo treatment for arterial hypertension using thiazide diuretics (hypothiazide, indapamide, arifon). In this case vertigo, lethargy, somnolence associated with hyposodemia are very frequent [24]. In this connection it is important to carry out clinical pharmacomonitoring of carbamazepin concentration (phinlepsin, tegretol and others) and okscarbazepin (trileptal) as well as sodium concentration in blood serum.

Considering the abovementioned we can recommend okscarbazepin, levetiracetam and lamotridgin for treating somatic postinsult epilepsy. Valproates and topiramt are preparations of another line because of their side effects.

## Conclusions

Data about development frequency (9.1% during ischemic and 16.6% during hemorrhagic STROKE), prognostic significance and epileptic attacks effect on its course and lethality during acute insult period depending on the mechanism of brain damage were obtained. The data received contribute to a better diagnostics and patient's treatment tactics both in case of ischemic and hemorrhagic insult. We defined the interrelation between «early» epileptic attacks which develop during the acute period of ischemic insult and pathogenetic mechanism of ischemic insult (hemodynamic impairments, cardioemboly or joint atherosclerotic stenosis and cardioemboly). «Early» attacks are prognostically an unfavourable factor in case of hemorrhagic character of insult. «Early» attacks develop in patients with ischemic large focus (over 50mm) ( $p = 0.0001$ ; OR – 3.32; 95% CI: 1.74-6.32) as well as during medium size hemorrhage ( $p = 0.0008$ ; OR – 2.66; 95% CI: 1.47-4.8). In case of ischemic character of insult «early» attacks may be severe course markers and correlate with a high risk of insult relapse which requires a more thorough neurological examination and taking special prophylactic measures to treat symptomatic postinsult epilepsy. We can recommend okscarbazepin, levetiracetam and lamotridgin. Valproates and topiramt are preparations of another line during this form of epilepsy because of their side effects.

## Literature

1. Burd G.S., Geht A.B., Lebedeva A.V. et al. *Epilepsy in patients with ischemic brain disease* // *Journal of Neurology and Psychiatry*. – 1998. – №2. – P. 4-8.
2. Geht A.B., Lebedeva A.V., Poletayev A.B. et al. *Postinsult epilepsy* // *Insult*. – 2003. – №9. – P. 195.
3. Prohorova E.S. *Epileptic attacks during cerebral bleeding flow impairment in patients with ischemic disease and atherosclerosis*.

4. Arboix A., Garcia-Eroles L., Massons J.B. et al. Predictive factors of early seizures after acute cerebrovascular disease // *Stroke*. – 1997. – Vol. 28, № 8. – P. 1590-1594.
5. Barolin G.S., Sherzer E. Epileptische Anfälle bei Apoplektikern // *Wein Nervenhe.* – 1962. – Vol. 20. – P. 35-47.
6. Berges S., Moulin T., Berger E. et al. Seizures and epilepsy following strokes: recurrence factors // *Eur. Neurol.* – 2000. – Vol. 43, № 1. – P. 3-8.
7. Camilo O., Golgstein L.B. Seizures and epilepsy after ischemic stroke // *Stroke*. – 2004. – Vol. 35, № 7. – P. 1769-1775.
8. Cheung C.M., Tsoi T.H., Au-Yeung M., Tang A.S. Epileptic seizures after stroke in Chinese patients // *J. Neurol.* – 2003. – Vol. 250, № 7. – P. 839-843.
9. Cleary P., Shorvon S., Tallis R. Late-onset seizures as a predictor of subsequent stroke // *Lancet*. – 2004. – Vol. 363. – P. 1184-1186.
10. Daniele O., Mattaliano A., Tassianari C.F., Natale E. Epileptic seizures and cerebrovascular disease // *Acta Neurol. Scand.* – 1989. – Vol. 80. – P. 17-22.
11. Hauser W.A., Ramirez-Lassepas M., Rosenstein R. Risk for seizures and epilepsy following cerebrovascular insults // *Epilepsia*. – 1984. – Vol. 25. – P. 666.
12. Hendry J. Seizure onset after age 60 years associated with increased risk of stroke // *Lancet*. – 2004. – Vol. 363. – P. 1184-1186.
13. Kellinghaus C., Lodenkemper T., Dinner D.S. et al. Seizure semiology in the elderly: a video analysis // *Epilepsia*. – 2004. – Vol. 45. – P. 263-267.
14. Kilpatrick C.J., Davis S.M., Tress B.M. et al. Epileptic seizures in acute stroke // *Arch. Neurol.* – 1991. – Vol. 48, № 1. – P. 9-18.
15. Kilpatrick C.J., Davis S.M., Tress B.M. et al. Epileptic seizures in acute stroke // *Arch. Neurol.* – 1990. – Vol. 47, № 2. – P. 157-160.
16. Lamy C., Domingo V., Semah F. et al. Early and late seizures after cryptogenic ischemic stroke in young adults // *Neurology*. – 2003. – Vol. 60, № 3. – P. 365-366.
17. Lancman M.E., Golimstoc A., Norscini J., Granillo R. Risk factors for developing seizures after a stroke // *Epilepsia*. – 1993. – Vol. 34, № 1. – P. 141-143.
18. LaRoche S.M., Helmers S.L. Epilepsy in elderly // *Neurologist*. – 2003. – Vol. 9. – P. 241-249.
19. Lossius M.L., Ronning O.M., Slapo G.D. et al. Poststroke epilepsy: occurrence and predictors—a long-term prospective controlled study Akershus Stroke Study // *Epilepsia*. – 2005. – Vol. 46, № 8. – P. 1246-1251.
20. Pack A.M., Morrell M.J. Epilepsy and bone health in adults // *Epilepsy Behav.* – 2004. – Vol. 5. – P. 24-29.
21. Pugh M.J.V., Cramer J., Knoefel J. et al. Potentially inappropriate antiepileptic drugs for elderly patients with epilepsy // *J. Am. Geriatr. Soc.* – 2004. – Vol. 52. – P. 417-422.
22. Ramsay R.E., Rowan A.J., Pryor F.M. Treatment of seizures in the elderly: final analysis from DVA cooperative study # 428 // *Epilepsia*. – 2003. – Vol. 44, № 19. – P. 170.
23. Ramsay R.E., Rowan A.J., Pryor F.M. Special considerations in treating the elderly patient with epilepsy // *Neurology*. – 2004. – Vol. 62. – P. 24-29.
24. Ranta A., Wooten G.F. Hyponatremia due to an additive effect of carbamazepine and thiazide diuretics // *Epilepsia*. – 2004. – Vol. 45. – P. 879.
25. Rumbach L., Sablot D., Berger E. et al. Status Epilepticus in stroke: report on a hospital-based stroke cohort // *Neurology*. – 2000. – Vol. 54, № 2. – P. 350-354.
26. Shorvon S.D. *Handbook of epilepsy treatment*. – Oxford (United Kingdom): Blackwell Science, 2000.
27. Sirven J.I. The current treatment of epilepsy: a challenge of choices // *Curr. Neurol. Neurosci. Rep.* – 2003. – Vol. 3. – P. 349-356.
28. So E.L., Annegers J.F., Hauser W.A. et al. Population-based study of seizure disorders after cerebral infarction // *Neurology*. – 1996. – Vol. 46, № 2. – P. 350-355.
29. Zaidi A., Clough P., Cooper P. et al. Misdiagnosis of epilepsy: many seizure-like attacks have a cardiovascular cause // *J. Am. Coll. Cardiol.* – 2000. – Vol. 36, № 1. – P. 181-184.

**РАННІ ЕПІЛЕПТИЧНІ НАПАДИ У ПАЦІЄНТІВ ПІСЛЯ ІНСУЛЬТУ ЯК ВАЖЛИВИЙ ПРЕДИКТОР ПЕРЕБІГУ ЗАХВОРЮВАННЯ**

**Н.В. Софілканіч, М.М. Орос, В.В. Луць, В.І. Смолянко**

За результатами дослідження були отримані дані про частоту розвитку (9,1% при ішемічному та у 16,6% – геморагічному інсульті), прогностичної значимості і впливі епілептичних нападів в гострому періоді інсульту на його перебіг і летальність в залежності від механізму розвитку пошкодження мозку. Отримані дані сприяють поліпшенню діагностики, тактики ведення хворого як ішемічним, так і геморагічним інсультом. Визначено взаємозв'язок «ранніх» епілептичних нападів, що розвиваються в гострому періоді ішемічного інсульту та патогенетичного механізму ішемічного інсульту (гемодинамічні порушення, кардіоемболія або поєднання атеросклеротичного стенозу з кардіоемболією). «Ранні» напади є прогностично несприятливим фактором при геморагічному характері інсульту. «Ранні» напади розвиваються у хворих з ішемічним вогнищем крупного розміру (більше 50 мм) ( $p = 0,0001$ ; OR - 3,32; 95% CI: 1,74-6,32), а також при крововиливах середнього ( $p = 0,0008$ ; OR - 2,66; 95% CI: 1,47-4,8) розміру. При ішемічному характері інсульту «ранні» напади можуть бути маркером важкого протікання і корелювати з високим ризиком розвитку повторного інсульту, що вимагає більш ретельного спостереження невролога та проведення профілактичних заходів. Для лікування симптоматичної постінсультної епілепсії можемо рекомендувати окскарбазепін, леветірацетам та ламотриджин. Вальпроати та топірамат пр. дані форми епілепсії е препаратами другої лінії, вважаючи на їх побічні ефекти

**Ключові слова:** епілепсія, інсульт, «ранні» епілептичні напади.

**РАННИЕ ЭПИЛЕПТИЧЕСКИЕ ПРИСТУПЫ У ПАЦИЕНТОВ ПОСЛЕ ИНСУЛЬТА КАК ВАЖНЫЙ ПРЕДИКТОР ТЕЧЕНИЯ ЗАБОЛЕВАНИЯ**

**Н.В. Софилканич, М.М. Орос, В.В. Луць, В.И. Смолянко**

В итоге исследования были получены данные о частоте развития (9,1% в течение ишемической и 16,6% в течение геморрагического инсульта), прогностическая значимость влияние эпилептических припадков на его ход и летальности в остром периоде инсульта в зависимости от механизма повреждения головного мозга. Полученные данные способствуют улучшению диагностики тактики лечения пациента, как в случае ишемического и геморрагического инсульта. Мы определили взаимосвязь между «ранними» эпилептическими припадками, которые развиваются в остром периоде ишемического инсульта и патогенезом ишемического инсульта (гемодинамических нарушений, кардиоэмболии или общего атеросклеротического стеноза и кардиоэмболии). «Ранние» атаки оказались прогностически неблагоприятным фактором в случае геморрагического характера инсульта. «Ранние» атаки развиваются у больных с ишемичным очагом большого размера (более 50 мм) ( $p = 0,0001$ , или - 3,32; 95% ДИ: 1.74-6.32), а также во время кровотечения среднего размера ( $p = 0,0008$ , или - 2,66; 95% ДИ: 1.47-4.8). В случае ишемического характера инсульта «ранние» атаки могут быть серьезным маркером тяжелого течения и коррелирует с высоким риском рецидива инсульта, которая требует более тщательного неврологического обследования и принятия специальных профилактических мероприятий для лечения симптоматической постинсультных эпилепсии. Мы можем рекомендовать окскарбазепин, леветирацетам и ламотриджин. Вальпроаты и топирамат являются препараты другой линии в лечении этой формы эпилепсии из-за их побочных эффектов.

**Ключевые слова:** эпилепсия, инсульт, «ранний» эпилептический припадок.