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THE THERAPY OF POST-STROKE DEPRESSION - THE FACTOR OF IMPROVEMENT OF LIFE QUALITY

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Depression prevents the rehabilitation of patients and also is connected with the low quality of life. We examined 30 patients with post-stroke depression (18 men and 12 women, the average age is $55,1 \pm 1,27$ years) in 1 – 12 months of the ischemic stroke. Patients took antidepressant fluvoxamine for 6 weeks. Neurological, psychopathological and psychometric investigations in dynamics were carried out. The latter included examination according to Gamilton's, Bek's, Spilberger's scales, questionnaire of quality of life MOS SF-36. It is established that the preparation is efficient both for treatment of depression and anxiety of patients who had ischemic stroke as well as it facilitates the rise of quality of life of these patients.

Key words: ischemic stroke, post-stroke depression, anxiety, antidepressants, quality of life.

Depression as a complication of the acute stroke (AS) was described in 1843 [Durand - Fardel]. Incidence rate of stroke provoked interest to the problem of poststroke depression (PD) prevalence of which according to different data makes up from 30 till 60% of cases [9, 12, 2, 3, 7, 8].

In most patients who had AS the level of their every day and social activity and as a whole life quality (LQ) decrease in comparison with the period before stroke [12, 3, 4, 5, 13].

According to the investigators in spite of good restoration of every day life functions (ADL) and return to the job in 83% of patients LQ doesn't reach the level which was before stroke [12, 4, 11]. One of the causes is PD which makes difficulties in participating patients in rehabilitation events, reduces their effectiveness and as a result promotes the severity of disability [12, 4, 5, 8].

Preparations of choice for the treatment of PD are selective inhibitors of reverse catch of serotonin (SIRCS) [1, 2, 5, 8, 10]. Thus according to A.B. Gekht and co-authors investigations the preparation of the SIRCS group-citalopram is very effective in the treatment of PD [2]. Possible effectiveness of another preparation of the SIRCS group – fluvoxamin in the treatment of PD is also mentioned [7, 10]. Fluvoxamin has a barely pronounced sedative effect therefore it can affect the anxiety conditions, correct sleep disturbances and it doesn't cause pronounced lethargy [7, 10]. Side anticholinergic sedative effects as a rule are barely pronounced and rare. It allows to apply fluvoxamin in case of accompanying somatic diseases in elderly and working patients [1, 8, 10].

The information mentioned above was the basis to study possibilities of fluvoxamin application patients with PD.

The aim: assessment of the effect of antidepressant of the SIRCS group – fluvoxamin on the course of depression in patients who had AS.

Materials and methods: 30 patients with PD were examined in the period from 1 till 12 months after ischemic stroke – 18 males (60%) and 12 females (40%), age from 41 to 61 years (the mean age – $55,1 \pm 1,27$ years). Duration of depressions was from 1 till 11 months. As diagnosis was made on the basis of anamnesis, clinical indices, presence of focus neurologic deficiency and data of computed tomography (X – ray and magnetic resonance). Clinical assessment of neurologic status was added with number assessment of neurologic deficiency according to Lindmark score. Integral assessment of the condition of healthy person according to this score is 487 numbers. According to Gekht and



co – authors data indices less than 345 numbers are typical for the severe stroke in restorative period 345 – 404 numbers for the stroke of the middle severity and 404 and more numbers for the stroke with limited consequences [2].

PD diagnostics was conducted according to ICD – 10 criteria [6]. During 6 weeks patients received besides traditional angioprotective, nootropic, hypotensive therapy fluvoxamin in the form of tablet – 100mg once a day in the evening every day. In the investigation Hamilton score of depression (HDRS) was used according to which indices from 7 to 15 numbers were considered as a small depressed episode, 16 and more numbers – as a large depressed episode. Assessment of anxiety was made according to Spilberger score of anxiety: to 30 numbers – low, 31 – 45 – moderate, 46 and more – high. Investigations according to these techniques were conducted before therapy in case of the primary psychopathologic examination and then in 2,4 and 6 weeks of treatment. Questionnaire of life quality MOS SF – 36 was also filled in. assessment of parameters is made according to 100 numbers score.

Criteria of insertion: absence of pronounced aphasia, of rough intellectual disturbances, psychosis, somatic diseases in the stage of decompensation and absence of antidepressant taking in anamnesis. Results and discussion: among the examined persons patients with a large depressed episode – 70% prevailed, a small depressed episode was determined in 30% of patients according to HDRS criteria.

Assessment of the structure of depressed episode has shown that anxiety and asthenic effects, somatovegetative symptoms with the prevalence of sleep disorders, general somatic symptoms and disorder of the sexual function were determined first of all. In this case patients as a rule had criticism to their condition. Mean number according to HDRS and Spilberger scores in patients who had ischemic stroke exceeded greatly the normative indices of healthy people (table 1).

By the end of the second week of therapy with fluvoxamin patients noticed subjective improvement of their condition: sleep became normal, irritation became less, tearfulness reduced. However improvement of mood was marked after the 4th week of therapy, that was confirmed by the indices of Gamilton's score (table 1).

Application of fluvoxamin led to the great decrease of expression of reactive anxiety (RA) in patients with PD. The level of personal anxiety (PA) was high enough that characterizes anxiety as a type feature of personality. Symptoms of somatic anxiety decreased. Reduction of unpleasant sensations in the body (sensations of air shortage, palpitation, feeling creepy all over and hyperhidrosis).

During the 4th week of treatment tendency to the reverse development of behavioural disorders was observed. The patients began to assess their condition more adequately, hypochondriac fixation reduced. They spoke about their somatic disorders with less interest. They could and wanted to maintain contact, their activity became higher, apathy reduced.

At the end of treatment weakness and fatigue reduced greatly, activity capacity for work and physical exercises increased, cheerfulness was observed, patients took more active part in rehabilitation events. Such disorders as difficulties in falling asleep, frequent awakenings, absence of rest feeling after sleep became normal. Depression, anxiety and tearfulness disappeared, mental and physical hyperesthesia reduced. Anxious reactions to unfavourable situation began to have adequate character. Amplitude and frequency of reactions similar to psychopathologic ones in the form of irritability and anger reduced. According to Lindmark score considerable changes in neurologic status were not noted in 6 week of fluvoxamin treatment (table 1).

Fluvoxamin tolerance was satisfactory in all cases. During the first 5-7 days of treatment 6 (20%) patients had mild nausea, which then stopped, 8 (26,7%) patients had low evident. Mild anorexia was observed in 6 (20%) cases and stopped in two weeks. These side effects which appeared against the background of fluvoxamin taking were not caused by drug withdrawal. Then according to general principles of depression treatment the patients were recommended to take the drug during 6 months in order to prevent recurrence of symptoms of depression [4,5,11].

According to the results of the investigation, introduction of fluvoxamin into the complex treatment of patients who had AS of ischemic character with PD statistically correctly affects all indices of LQ under the MOS SF 36 questionnaire after 6 weeks of therapy leading to the improvement of all parameters of LQ of the patients (table 2). Such indices as physical activity, pain, general health, vital capacity, social activity, mental health increased in comparison with the initial ones 1,2 – 1,5 times, but indices of role of physical and emotional problems in the limitation of vital activity against the background of fluvoxamin therapy increased 4 times. The results show that depression intensifies feelings of corporeal trouble increasing their affective saturation (table 2).

Conclusions:

1. The investigation showed the effectiveness and safety of fluvoxamin therapy in the treatment of depressive and anxious disorders in patients who had AS.
2. Not only rehabilitation events aimed at the functional recovery of walking, self – servicing but also treatment of PD in these patients which may occur frequently and prevent from reintegration of patients into the family and society, recovery of mental and motional activities contribute to the increase of LQ of patients who had stroke. Thus, complex approach to the treatment of patients of this group is necessary which means cooperation of doctors of different specialities, in particular, neurologists and psychiatrists.

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Table 1.

Index dynamic of depression, anxiety, and nidal neurological deficits during fluvoxamine treatment, marks.

Показатели		Контрольные точки исследования				P	P1	P2
		До лечения	Через 2 недели	Через 4 недели	Через 6 недель			
Общий балл по шкале HDRS		20,67±1,19	17,8±1,2	11,67±0,83	9,43±0,44	p>0,05	p<0,001	p<0,05
Общий балл по шкале Спилберга	ЛТ	58,87±2,12	58,27±2,12	52,8±2,34	46,73±2,16	p>0,05	p>0,05	p<0,001
	РТ	56,27±2,35	50,6±2,41	43,07±1,87	34,87±1,64	p>0,05	p<0,001	p<0,001
Общий балл по шкале Линдмарк		384,6±33,4	-	-	385,7±33,6	-	-	p>0,05

Примечание: - P – достоверность различий между исходными данными и через 2 недели;

P1– достоверность различий между исходными данными и через 4 недели;

P2– достоверность различий между исходными данными и через 6 недель;



Table 2.

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The therapy of post-stroke depression as the factor of improvement of life quality during the period of rehabilitation.

Mean observation of LQ during fluvoxamine therapy, marks (according to the MOS SF36).

	LQIndexes							
	PF	RP	BP	GH	VT	SF	RE	MH
Before treatment	42,45±2,97	10,38±1,96	59,8±3,42	32,36±1,18	28,23±1,61	38,21±2,11	22,64±2,95	42,42±1,93
After treatment	60,0±3,15	41,67±3,15	85,83±4,2	39,0±1,4	39,0±1,4	59,17±3,55	91,11±3,94	61,87±1,83
p	p<0,001	p<0,001	p<0,001	p<0,001	p<0,001	p<0,001	p<0,001	p<0,001

Note: p – Reliability of distinctions

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