

Stroke Patients as an Aspect of Medical and Social Rehabilitation

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Abstract

According to WHO data, in economically developed countries, CMI is the third leading cause of death, second only to CHD and cancer. The COVID-19 pandemic caused an increase in stroke patients. Rehabilitation of post-stroke patients is one of the most important problems of neurology. Sudden loss of the ability to control your body, lack or deterioration of speech, inability to take water, food, and movement independently, and inability to perform professional activities is the main factor in the development of depression and feelings of hopelessness. The task of treatment and rehabilitation is to return these patients to their previous life as soon as possible, to adapt them physically and socially to everyday life, taking into account the lost functions.

1. Relevance.

Strokes are one of the most important problems of society and are the main cause of long-term disability in patients. More than 15 million strokes are registered annually in the world. 50% of stroke patients are more or less dissatisfied with their quality of life. Disability after strokes in Uzbekistan is 73.8%, and the percentage of hospital deaths is 17.3% (2019). In the occurrence of stroke, an important place is occupied by the environment, which is a complex factor that contributes to the occurrence of various pathological processes and diseases in humans [1,2]. According to WHO data, in economically developed countries, CMI is the third leading cause of death, second only to CHD and cancer. The COVID-19 pandemic caused an increase in stroke patients [5,6]. Rehabilitation of post-stroke patients is one of the most important problems of neurology. Sudden loss of the ability to control your body, lack or deterioration of speech, inability to take water, food, and movement independently, and inability to perform professional activities is the main factor in the development of depression and feelings of hopelessness. According to statistics According to the

National Association for Stroke Prevention (NABI), 31% of stroke survivors need outside help, 20% cannot walk independently, and only 8% of survivors can return to their previous life (NABI, 2011) [5]. Recovery and rehabilitation of such a patient is an important medical and social task, which requires quite high economic costs for the state and the family. When a stroke strikes a patient, it puts a heavy burden on their family members and caregivers. Timely, properly organized treatment and rehabilitation helps the patient to restore lost functions, minimize the defect as much as possible, and adapt to their condition [3].

2. Purpose of the Study.

To study the level of disability in patients who have suffered a stroke, to determine the impact of rehabilitation on the quality of life, and on the patient's return to active social activities.

3. Research Methods.

A retrospective statistical study of outpatient records of patients was conducted, based on the compiled questionnaires, a survey of stroke survivors was

Journal of Coastal Life Medicine

conducted and statistical data were studied. Information processing was carried out using Word - 2010 and Excel – 2007 programs.

4. Own Research.

The stroke Registry of various countries shows that about 40% of patients who have had a stroke need constant care; 20% of patients are unable to walk independently; only 20-25% of patients will be able to return to their previous work after rehabilitation. The task of treatment and rehabilitation is to return these patients (60% of patients) to their previous life as soon as possible, to adapt them physically and socially to everyday life, taking into account the lost functions.

Acute cerebral circulatory disorders (ACVI) occupy the second place in the structure of total mortality and the 11th place among all causes of disability in the population...[4]. More than 68,000 stroke cases are registered annually in Uzbekistan. According to WHO, 40% of patients with coronavirus are mild and do not require hospitalization, 40% have moderate symptoms that may require hospitalization, 15% have a severe course of the disease that requires oxygen therapy and other medical measures in the hospital, and 5% develop extremely severe pathologies that require hospitalization. Mechanical ventilation [6].

The COVID-19 pandemic, which manifested itself with a diverse clinical picture and has various morphological masks of COVID-19 (cardiac, cerebral, intestinal, renal, hepatic, diabetic, thromboembolic, microangiopathic skin, and others), caused an increase in stroke patients both among young people who do not have a risk and among patients with chronic cardiovascular diseases., angiopathic and diabetic diseases [2].

Today, post-stroke complications occupy a leading position in the structure of neurological diseases in the world. Disability of patients due to stroke increases from year to year. The problem of diagnosis and preventive treatment of cardiovascular diseases is becoming increasingly relevant all over the world. Questions of improving medical care for strokes is the most urgent scientific and practical task of modern medicine. Huge economic and social damage is caused by vascular diseases of the brain It is necessary to improve medical care for strokes, which is an actual scientific and practical task of modern medicine. The

disability of post-stroke patients is increasing. The disability rate in 12 months after a stroke range from 76 to 85%. Only 10-12% of patients return to their previous work, while 25-30% of patients remain severely disabled until the end of their lives [4,5]. Diseases of the nervous system in almost all nosology's affect the motor system, while motor deficiency is the main cause of disability of diseases of the brain and brain. the spinal cord. The rapid development and introduction of high-tech and highly informative diagnostic methods in recent decades have contributed to a more in-depth study of the organization of the central mechanisms of the motor system, both in normal conditions and in various pathological processes, which allows the doctor to prescribe adequate treatment that corresponds to the patient's condition [1, 5]. Post-stroke conditions of the patient require long-term targeted rehabilitation, which consists of several stages, each of which has certain goals and objectives and is one of the main problems of practical healthcare. Medical rehabilitation is a system of state, socio-economic, professional, pedagogical, psychological, and other measures aimed at preventing the development of pathological processes that lead to temporary or permanent disability, effective treatment, and earlier return of patients and disabled people to society and socially useful work [3,7,8]. At the same time, in rural areas, it is used as a means of social rehabilitation. 1.5 times higher than in the city. Disability after a brain stroke is an average of 83.8%, while it is higher in the city (94.7%) than in rural areas (72.9%). Thus, if the mortality rate is higher in rural areas than in urban areas the percentage of disability is higher due to a higher survival rate of patients. This situation is an important social problem, as today there are about 150,000 disabled people in Uzbekistan who need constant care. If we take into account that each of them requires the care of two able-bodied adults, the economic side of this problem becomes obvious. In multicenter European and American randomized trials, it has long been proven the: superiority of surgical treatment in comparison with conservative treatment in patients with carotid artery stenosis and signs of chronic cerebrovascular insufficiency. Today, carotid endarterectomy is second only to revascularization interventions on the coronary arteries in terms of frequency worldwide [3,9]. However, the number of operations performed on the carotid arteries in clinics in our country is minimal. According to estimates, today the Republic needs 6,000 reconstructive

Journal of Coastal Life Medicine

operations on the carotid arteries per year, but throughout the Country, the following operations are performed: only 600-700 operations. Reconstructive surgery for occlusive pathology of the brachiocephalic arteries reliably prevents ischemic stroke in patients with hemodynamically significant carotid artery stenosis. The long-term results of these operations indicate reliable long-term prevention of ischemic stroke. The study of these issues is a very urgent task, taking into account the increasing number of patients with chronic cerebrovascular disorders [9]. This would certainly help to improve the treatment outcomes of patients with ischemic stroke and prevention of repeated acute disorders of cerebral circulation in them. The world has found a solution to the above-mentioned problems by creating angioedema centers that deal with the diagnosis and treatment of carotid artery diseases. For example, the Charite Clinic in Germany, Vienne (Austria), Izmir (Turkey), and Samara (Russian Federation) have established angioedema centers. In these centers, specialists such as vascular surgeons, neurologists, cardiologists, ophthalmologists, resuscitators, as well as other specialists in narrow areas of medicine together effectively treat patients who have suffered an ischemic stroke, as well as those patients who are threatened with it. They report on their results at international congresses and conferences. The correct organization of the therapeutic or surgical process immediately after a cerebrovascular accident determines the further strategy for the effectiveness of the patient's rehabilitation after a stroke. One of the main principles of organizing the treatment process for stroke patients is to start treatment as quickly as possible, aimed at restoring blood flow in the affected area of the brain and protecting it from hypoxia and ischemia.

The tasks of rehabilitation are the influence on the restoration of human vital functions using physical and psychological methods, the impact on the body using drug therapy to improve and normalize metabolic processes and develop an adaptation system for irreversible changes caused by the pathological process of. Goals of rehabilitation measures after stroke. This:

- maximum possible movement recovery
- improving walking
- speech recovery and improvement

- self-service training
- social and psychological adaptation
- prevention of recurrent stroke and its complications
- increased life expectancy
- improving the quality of life
- training and psychological support for family members

The basis of rehabilitation activities is the coordinated work of a multidisciplinary team. Various methods and technologies of a rehabilitation treatment are based on the knowledge and mechanisms of neuroplastic reconstruction processes [7].

In the process of rehabilitation treatment of patients after a stroke, there are three levels of rehabilitation. The first level is aimed at restoring impaired functions that return or approach the initial level.

The second level is compensation based on the transformation of preserved brain systems and prevents the development of pathological conditions that prevent the regression of functional deficits.

The third level is readaptation, or adaptation to a post-stroke defect [7,8]. Readaptation is necessary as part of rehabilitation treatment in cases of anatomical and functional defects. The first two levels relate to the competence of medical rehabilitation and the last-the competence of social rehabilitation. In addition, this strategy is aimed at preventing the development of possible complications, such as pressure sores, contractures, aspiration pneumonia, shoulder pain, falls, and fractures. Drug therapy of the studied patients was represented by basic and differentiated therapy. Basic therapy included the correction of basic vital functions. Neurorehabilitation of patients after stroke was carried out using a coordinated multidisciplinary approach, with the provision of systematic continuous, and consistent rehabilitation treatment aimed at restoring and compensating for impaired functions, maintaining mobility, household independence, quality of life, and ensuring other safe functions. The main goal of post-stroke neurorehabilitation was to return patients to active social life as quickly as possible. This reduced the level of maladjustment and improved the quality of life of patients and relatives. Of the total number of

Journal of Coastal Life Medicine

patients, 67.5% had motor deficits in the arm six months or more after the stroke. In particular, 4 years after the stroke, only 8.2% of patients were satisfied with the functioning of the paretic arm. At the same time, the risks of post-stroke complications were noted in 16.8% over the next 5 years, in 42.6% - over 10 years, which is 15 times higher than in the general population of the corresponding age. The number of recurrent strokes was observed in 3(12.5%) patients. Big importance is attached to arterial hypertension (AH), which is common in developing countries in 20-30% of adults [10]. In the structure of the overall morbidity (2015) in the Republic of Uzbekistan, hypertension is 40.4%, and CHD-17.51% [5]. Acute myocardial infarction was found in 0.59%, recurrent myocardial infarction was 0.14%, cerebrovascular diseases were 4.05%, and chronic rheumatic heart disease was 1.91%. Differentiated therapy of patients, along with mandatory neurorehabilitation measures, included reperfusion therapy, neuroprotection, secondary prevention, and treatment of post-stroke complications. The study showed that among patients who have suffered a stroke, the first-ranked places are occupied by cardiovascular diseases. It was revealed that in the structure of patients who had suffered a stroke, cardiovascular pathology was observed in 21(18.6%), hypertension in (71.4%), anemia in 4 patients (9.0%), NCD-2 patients (9.6%), diabetes mellitus in 3 (15.3%). kidney pathology was observed in 14 (21.2%).

As noted in the literature, “... the earlier rehabilitation treatment is initiated, the better the survival rate of neurons in the penumbra zone. In the absence of restoration of blood flow during the “therapeutic window”, the death of neurons is expressed by a violation of motor, sensory, speech and other cerebral functions. Recovery of damaged neurons in the first days after a vascular catastrophe occurs mainly due to edema or reperfusion of the ischemic region. At this stage, it is strategically important, depending on the nature of the pathogenetic variant of stroke development, to carry out measures to improve the quality of life. brain tissue perfusions (early vessel recanalization and reperfusion). The effectiveness and safety of therapeutic reperfusion are maintained within 3-6 hours after the development of ischemia. For this purpose, the dynamics of the subjects studied since the beginning of therapeutic reperfusion were studied. The study found that patients mainly used anticoagulants,

antiplatelet agents, and tissue activators of plasminogenesis. At the same time, in the third part of patients, therapeutic reperfusion was started on time, within 3 hours (28.7%), from 3 to 7 hours after the onset of ischemia in patients (36.8%). However, for various reasons, 12.5% of the study subjects started therapy relatively late, and 22.5% started therapy late, from 7 to 12 hours or more days, which ultimately had an impact on post-stroke complications. ONMC increases the risk of developing complications such as repeated strokes, aspiration pneumonia, pressure sores, contractures, paresis and plexitis, shoulder pain, falls and fractures, etc. dynamic monitoring by a family doctor and a specialized specialist. Methods of physical and neuropsychological rehabilitation significantly influence the degree of rehabilitation treatment of various functions and systems after a stroke. Proper care and pharmacological therapy, adequate rehabilitation, and nutrition were the basis for preventing the development of various complications. In particular, it is the prevention of thromboembolic complications, treatment of secondary infection, correction of psychomotor agitation, etc.

5. Conclusion.

In the current socio-economic conditions, the reproductive health status of post-stroke patients remains one of the most acute medical and social problems. The leading position of post-stroke complications in the structure of morbidity requires the development of new approaches to diagnosis, treatment, patient care, and early prevention of complications since the results of treatment directly depend on the lesion site and the stage of the disease process.

The introduction of screening measures for post-stroke rehabilitation of patients provides for the use of a whole range of methods and technologies, including drug therapy, at all stages of medical rehabilitation, starting from the acute period of the patient. Patients with a high risk of STROKE are subject to mandatory dynamic monitoring by doctors of a multidisciplinary team (family doctor, cardiologist, neurologist, optometrist, neurosurgeon, psychotherapist, etc. management and determination of tactics and type of treatment, as well as taking on dispensary registration in the risk group for ONMC prevents the development of persistent disability and early mortality.

Journal of Coastal Life Medicine

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