



## Clinical and Epidemiological Features of Stroke in the Fergana Valley

**1. Mamatalieva Janona Alimjanovna**

Received 19<sup>th</sup> Jan 2022,  
Accepted 10<sup>th</sup> Feb 2022,  
Online 5<sup>th</sup> Mar 2022

<sup>1</sup> Assistant, Fergana Public Health Medical Institute, Uzbekistan, Fergana

**Abstract:** This article presents a comparative analysis of the clinical-epidemiological features of stroke. Diseases of the brain, blood vessels-one of the pressing medical and social problems, is the leader in the level of disease stocking and mortality in economically developed countries. Vascular diseases and especially heart diseases are also important medical and social problems in Uzbekistan. This is determined by the primary disability associated with the disease and the high mortality rate.

**Keywords:** stroke, clinical-epidemiology, blood circulation, correction.

According to the forecast of the World Health Organization, the number of deaths caused by diseases of the circulatory system amounted to 17 million in 2008, by 2030 it reached 25 million increase up to. The indicator of death caused by diseases of the circulatory system is one of the highest in the world, while in Uzbekistan it is 55.4% of all fatal causes. Of this, 83.9% occurred as a result of cerebrovascular diseases.

It is important to conduct primary prophylaxis of the disease by correcting the main regularizing risk factors, reducing the indicators of the disease and its consequences, death, disability.

From the studies it became clear that the measures aimed at introducing profilactic methods of treatment and reducing risk factors have led to a decrease in disease indicators among representatives of all ages and genders around the world over the last 40 years. At the same time, work is currently underway to study the pathogenetics of the development of cerebrovascular diseases and find new risk factors.

The fact that the disease is very common among the working-class population, causing not only a decrease in labor resources, but also a temporary death, disability and temporary incapacity for work, the reduction of the gross domestic product of the country leads to serious economic damage.

The foregoing testifies to the fact that cerebrovascular diseases are a global epidemic, which brings out not only the medical and social problems, but also the problems of the general scale.

Accordingly, the approach to the disease, taking into account climate, regional and social factors, is important in solving the problems associated with it.

According to foreign authors (Sarti S., Rastenyte D., Cepaitis Z., et al., 2000; Howard G., Howard VJ., Katholi C., et al., 2001; National Center for Health Statistics. Health, United States, 2005: With

Chartbook on Trends in the Health of Americans. Hyattsville, 2005; Claire L. Allen, 2008; Shinichiro Uchiyama, Noriaki Nakaya, Kyoichi Mizuno, 2009; Benamer H.TS., Grosset D., 2009), - stroke is a global epidemic threatening the life and health of the world's population. According to WHO, the impact of healthcare on the level of public health, including morbidity, is 10%, while the contribution of medicine to reducing mortality reaches 40% (Academician of the Russian Academy of Medical Sciences O. Shchepin).

The problem of cerebral stroke (CS) in Uzbekistan is gaining increasing medical and social significance due to the increasing prevalence of general cardiovascular pathology, an increase in the number of elderly and senile people among the population, a high level of disability of people who have suffered a stroke. Arterial hypertension (AH) and atherosclerosis are the main causes of acute disorders of cerebral circulation. If atherosclerosis is considered as an unregulated risk factor, then the implementation of population programs to combat hypertension has a significant impact on reducing the incidence of stroke.

In Uzbekistan, ONMC is the second most common cause of death after cardiovascular pathology and ranks first among the causes of disability. An important event is timely diagnosis and provision of qualified medical care. It is necessary to ensure that the patient receives help as early as possible, no later than 6 hours from the moment of the brain catastrophe, i.e. in the "therapeutic window". Here a lot depends on the work of the medical service at the pre-hospital stage. It provides for a high level of training of ambulance doctors, district therapists and neuropathologists in diagnostics, the volume of emergency medical measures, and medical tactics for ONMC. In the system of stage-by-stage medical care for patients with ONMC, the pre-hospital stage plays an important role. Its tasks are: providing medical care, early diagnosis, fast and safe transportation of the patient to a specialized department of the hospital.

The most significant risk factors for stroke are arterial hypertension, coronary heart disease, dyslipidemia, atherosclerosis, which caused high morbidity (2.5-3.2% y), mortality (0.23-0.370/y) and mortality (9.2-13.6%) annually.

The aim is to obtain reliable, comparative and comparable data on the epidemiology of ischemic stroke. To identify changes and trends in the structure of epidemiological indicators of stroke. Research objective: To develop effective recommendations for stroke prevention. Epidemiology: According to the author, about 17 million people suffer from stroke every year, 70% of whom live in low- or middle-income countries.

Cerebrovascular pathology, especially acute disorders of cerebral circulation, is one of the most difficult problems of medicine. In one year, about 780 thousand strokes occur in the USA, in North America as a whole (USA and Canada) - 1.2 million, in the European Union - up to 1 million, in the rest of the world - about 10 million. strokes. On average, the prevalence of strokes is approximately estimated as 200 cases per 100 thousand population annually [3], although it varies in different regions, depends on race and many other factors.

Ischemic strokes on the Fergana Valley are now widely used TOAST (Adams H.P. et al., 1993) according to its classification, it is distinguished by the following pathogenetic variants: 37 % (n=3967) atherothrombotic, 32 % (n=3431) cardioembolic, 9 % (n=965) lacunar, 10 % (n=1072) hemodynamic, 12 % (1286 units) hemoreological podtips.

Among the main risk factors are arterial hypertension 90 % (n=17258), smoking 24 % (n=4602), heart disease 45 % (n=8629), hilpillating arrhythmia 22 % (n=4219), myocardial infarction 12 % (n=2301), dyslipoproteidemia 27 % (n=5178), diabetes 38 % (n=7287), hereditary predisposition 43 % (n=8246), anemia 61 % (n=he founded 11697).

Basic stroke therapy is carried out regardless of the nature of the stroke and begins from the first minutes of the patient's admission to a specialized hospital.

- Normalization of vital functions - respiration and cardiovascular activity. If consciousness is not disturbed or oppressed no deeper than the sopor (the patient opens his eyes if he is called), it is necessary to sanitize the upper respiratory tract and ensure free breathing (elimination of factors that make breathing difficult – tight clothes, uncomfortable head position, tongue entanglement, dentures, etc.). With depression of consciousness deeper than the sopor, oxygen inhalation is necessary, and with inadequate breathing – ventilation.
- The fight against high or low blood pressure is carried out in stages. Stabilization of elevated blood pressure at a level exceeding the patient's usual level by 20 mmHg, and in the absence of anamnestic data not lower than 150-160/90 mmHg.
- Fight against cerebral edema (intracranial hypertension). Brain edema is defined as an excessive accumulation of fluid in the brain tissue, which leads to swelling and an increase in the volume of the latter. But the bone walls of the skull are not stretchable! Intracranial pressure increases sharply, which causes displacement of brain structures, and sometimes their compression. One of the main methods of treating brain edema is the introduction of special drugs - osmotic diuretics. They create a high osmotic pressure of the blood, which causes fluid from the brain tissue to flow into the blood along a pressure gradient, the flow of which carries it away from the cranial cavity.
- Maintenance of water-electrolyte balance - the optimal ratio of body fluids and electrolytes (potassium, sodium).
- Maintaining a normal blood glucose level (glycemia), since low (hypoglycemia) and high (hyperglycemia) blood glucose levels are equally dangerous for the brain, therefore it is necessary to maintain normoglycemia.
- Maintaining a normal body temperature, since the temperature is above 38°C aggravates brain damage, therefore, temperature reduction is carried out both medicinally and with the help of external cooling (water-alcohol wipes, ice bubbles). But be sure to find out the cause of the fever, as it may be a manifestation of an infection that requires a completely different treatment.
- The fight against deep vein thrombosis in bedridden patients (the risk of pulmonary embolism and death of the patient) is carried out by elastic bandaging of the lower extremities, the use of pneumatic massagers, as well as the use of small doses of anticoagulants (heparin, fraxiparin), which reduce the tendency to thrombosis.
- Relief of psychomotor agitation, epileptic seizures, nausea and vomiting, pain syndrome is carried out by special groups of drugs.
- It is mandatory to prevent bedsores -treating the patient's skin, turning him over in bed, positioning the limbs with special pillows. Rehabilitation of the patient begins as early as possible. Early rehabilitation - for 2-3 days with a stable condition of the patient - significantly improves the outcome of a stroke. It includes – passive movements in the extremities for the prevention of contractures, verticalization of the patient with the help of a special table - verticizer, in stable condition – mobilization of the patient: transplanting to a chair several times a day, physical therapy, physiotherapy, speech and swallowing disorders – speech therapy correction.
- The patient's nutrition begins with 1-2 days. In case of swallowing disorders (assessment of swallowing function is carried out immediately upon hospitalization and during treatment), a nasogastric probe is installed and nutrient mixtures are used for nutrition. If the patient is conscious and can swallow, then nutrition is carried out in the usual way.

The analysis of the above data showed that stroke is common among population aged 45 to 74 years, with these indicators increasing among young people. In regions where the air is more contaminated with heavy metals, a stroke is more noted, the number of deaths is more common in districts where neurovisual diagnostic methods are poorly used or are not used at all. The main risk factors, however, are the excessive use of animal fats in the diet ration to bypass the district regions. Also, diseases that accompany the occurrence and prognosis of radiotherapy (diabetes, Covid-19 infection, heart disease and b.) as aggravated and taking into account them in the treatment, complex indicates the importance of concomitant.

To develop practical recommendations for the prevention of ischemic atherothrombotic stroke for neurologists, cardiologists, vascular surgeons. To develop a program of primary and secondary prevention of ischemic stroke, taking into account the regional characteristics of epidemiological indicators in the Fergana valley. To implement the developed set of measures to prevent vascular diseases and reduce mortality and disability from strokes and myocardial infarctions in the Fergana valley, which will reduce morbidity, mortality and disability due to vascular pathology of the brain and heart. Together with specialists not only in the field of healthcare, but also in social, economic and other spheres, to develop primary and secondary preventive measures to improve the quality of life of patients with ischemic stroke, which will significantly reduce the human and economic losses of society.

It can be concluded that the implementation of a healthy lifestyle and proper nutrition regime among population, timely treatment using modern diagnostic methods and a serious approach to environmental problems are important in the prevention, treatment and prophylaxis of the disease.

#### References:

1. Mangla R, Kolar B, Almast J, et al. Border zone infarcts: pathophysiologic and imaging characteristics. *Radiographics* 2011;31(5). P. 1201-1214.
2. Benjamin EJ, Blaha MJ, Chiuve SE, et al. Heart disease and stroke statistics-2017 update: a report from the American Heart Association. *Circulation* 2017; 135(10). P.
3. Yang Q, Tong X, Schieb L, et al. Vital signs: recent trends in stroke death rates -United States, 2000-2015. *MMWR Morb Mortal Wkly Rep* 2017; 66(35). P. 933939.
4. Depuydt S, Sarov M, Vandendries C, et al. Significance of acute multiple infarcts in multiple cerebral circulations on initial diffusion weighted imaging in stroke patients. *J Neurol Sci* 2014;337(1-2). P. 151-155.
5. Muminjon N., Dilshodjonugli N. S. Improvement of transformer protection elements // *ACADEMICIA: An International Multidisciplinary Research Journal*. – 2020. – T. 10. – №. 6. – C. 394-398.
6. Khasnulin V. I., Artamonova O. G., Khasnulina A. V., Pavlov A. N. Adaptive types of mobilization of organism adaptive reserves and resistance to hypertension in the North // *Ekologiya cheloveka [Human Ecology]*. - 2014. - №7. - P. 24-29.