

**THROMBOLYTIC THERAPY IN THE TREATMENT OF ISCHEMIC STROKE**

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Ischemic stroke is a clinical syndrome represented by focal and/or cerebral disorders that develops suddenly due to the cessation of blood supply to a certain part of it as a result of occlusion of the arteries of the head/neck with the death of brain tissue [1]. Stroke is the most important health problem in many countries of the world. 0.2% of the population suffers from stroke every year (2 LLC per 1 million population). Of these, a third die during the following year (4.4 million deaths), a third lose their ability to work and only a third of patients completely recovering. All this affects both the socio-economic and political state of the country. Stroke is the second most common cause of death in the world, high rates of morbidity, mortality and disability of the population due to brain strokes, put the prevention and treatment of this disease on a par with the most pressing problems of our time. As the authors note in their works (Vereshchagin N.V., Suslina Z.A., 2002), ischemic strokes occupy 75-80% of the structure of strokes. Speaking about the causes of focal cerebral ischemia, the authors (Pokrovsky A.V., 2003; Chernyavsky A.M., 2003; Rothwell P.M., Gutnikov S.A., Warlow C.P., 2003; Goldstein L.B., 2002) are noted as the most common cause: thrombosis or embolism of extra- or intracranial arteries, as well as hypoperfusion of the brain against the background of hemodynamically significant arterial stenosis of the brain the brain. 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 (ST) is gaining increasing medical and social significance due to the increasing prevalence of general cardiovascular pathologies [3, 4, 5, 6], an increase in the number of elderly and senile people among the population [6], 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. An important event is timely diagnosis and provision of qualified medical care help. 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 ACA. In the system of stage-by-stage medical care for patients with ACA, the pre-hospital stage plays an important role. Its tasks are: providing medical care assistance, 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 annually (2.5-3.2%0), mortality (0.23-0.37%0) and mortality (9.2-13.6%).

**The relevance of research.** Currently, intravenous thrombolysis is most often used as a highly effective aid for ischemic stroke. To date, intravenous administration of Actelize at a dose of 0.9 mg / kg, maximum 90 mg (10% of the dose bolus, followed by infusion for 60 minutes in the first 4.5 hours after the development of IS) has the highest level of evidence (class I, level A) and is recommended for patient management.

**Research results.** The study involved 30 people who were divided into 2 groups (they are homogeneous in gender and age composition, first-time strokes in carotid pools were taken into account). The first group of patients (10 people) underwent TLT with the drug Act-101 lisa. The second group (20 people) was not administered the drug. Patients were analyzed on the NIHSS scale before TLT and on the 14th - 16th day after it. Lethality was also investigated, hemorrhagic complications were noted. In patients receiving TLT, mortality was 20%. In a group of patients, those who did not receive TLT, the mortality rate was 15%, which is not statistically different. The data show that mortality does not depend on the method of treatment (TLT or without it), but on the initial severity of the stroke. In deceased patients, the NIHSS score was 14-20 points (17.2 on average), which is significantly higher than in patients who survived by day 14. The complication (intracerebral hematoma) was 10%. The assessment of the severity of patients was carried out using nonparametric statistics in the SPSS program according to the Mann-Whitney criterion in groups for independent and related samples. The results were considered reliable at ( $p < 0.05$ ). In the group of patients with TLT, the severity of the condition on the NIHSS scale ranged from 5 to 22 points, an average of 11.4 points. In patients of the control group – from 3 to 20 points (average 8.8). The severity of the condition of patients before TLT was significantly higher than patients without TLT. In discharged patients, the severity of the condition did not significantly differ (5.9 and 5.5 points in the groups). A comparison of the effect of treatment on the severity of the condition showed that after treatment, the severity of the condition in both groups significantly decreased (confidence coefficient  $< 0.01$  in both groups), that is, treatment for surviving patients is effective in any case. However, considering that in the group of patients with TLT, the severity of the condition was significantly higher initially, it can be concluded that TLT is more significant for reducing the severity of neurological deficit in AI patients.

**Conclusions.** Thus, TLT is a highly effective method of treatment and correction of ischemia with a good functional outcome, in combination with drug therapy and early rehabilitation of the patient.

### **Literature**

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