

Stroke — Causes and Prevention

Mavlonova Dilnoza Bakhodirovna
Tashkent Medical Academy

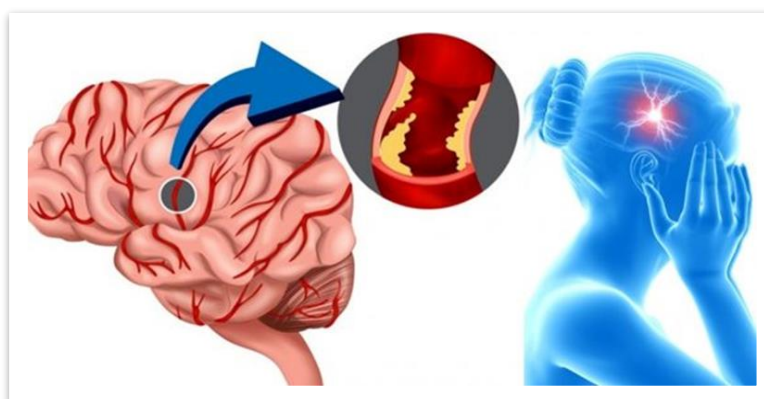
Annotation: This article provides information on the causes of stroke and treatment methods. A stroke occurs when the blood supply to a part of the brain stops or decreases. This prevents oxygen and nutrients from reaching the brain tissues. Brain cells begin to die within minutes. Effective treatments can help prevent disability caused by stroke. This is not only a medical problem, but also a social one.

Factors that increase the likelihood of developing a stroke include:

The older a person is, the more likely they are to develop a stroke. The condition of blood vessels deteriorates with age, and chronic diseases affect cerebral circulation, which worsens with age. Some drugs (long-term use) increase the likelihood of developing heart disease. Oral contraceptives containing estrogens increase the risk of stroke. Pregnant women or those taking contraceptives should be especially careful. Bad habits, especially smoking. Excessive consumption of alcohol is an important provocative factor for stroke. Cigarettes and alcohol together significantly increase the likelihood of developing cardiovascular diseases, which in turn contributes to the occurrence of strokes.

Keywords: Ischemic stroke, Hemorrhagic stroke, CT, MRI and EEG, Transient ischemic attack.

Ischemic stroke (cerebral infarction). This is the most common type of vascular disease. This happens when the blood vessels in the brain are narrowed or blocked, causing a sudden decrease in blood flow (ischemia). Blocked or narrowed blood vessels are caused by fatty deposits, blood clots, or other debris that travel through the bloodstream, often through the heart and into blood vessels in the brain. Some preliminary studies suggest that infection with COVID-19 may increase the risk of ischemic stroke.



Hemorrhagic stroke (intracerebral hematoma). This is a blood injury to a certain part of the brain. It accounts for about 10% of all cases. A hemorrhagic stroke is caused by a ruptured blood vessel in the brain. Brain hemorrhages can be caused by many conditions that affect the blood vessels. Factors that cause a hemorrhagic stroke include:

- Uncontrolled high blood pressure
- Excessive treatment with blood thinners (anticoagulants)
- Swellings (aneurysms) in weak areas of blood vessel walls

- Trauma (such as a car accident)
- Accumulation of protein in the walls of blood vessels leads to weakening of the walls of blood vessels (cerebral amyloid angiopathy)



Patients suffering from a stroke should be treated very carefully. It is necessary to raise the patient's head a little higher than the body and not allow them to move. In the acute period of the disease, the patient should be kept at rest, and if there are dental prostheses in the mouth, they should be removed. Cleaning around and inside the mouth from saliva and vomit residues, providing fresh air, holding the lower jaw, placing an air tube to prevent the tongue from retracting and improving breathing, upper respiratory tract cleaning with the help of electrocautery, putting a probe into the stomach is required. Medicines that improve blood circulation in the brain - eufillin 2.4% 5-10 ml intravenously, magnesium sulfate 25% 5-10 ml intramuscularly with novocaine, papaverine 2% 2 ml, dibazol 1% 2-4 ml intramuscularly. On the first day, the patient should be fed 5 times a day through a tube, if the patient does not swallow sweets and fruit juice later.

Ischemic stroke that causes bleeding

A less common cause of bleeding in the brain is an irregular rupture of thin-walled blood vessels (arteriovenous malformation).

Stroke signs and symptoms:

Symptoms of pathology are manifested as follows:

Sudden weakness, insomnia, facial muscle paralysis (usually on one side of the body);

Loss of speech;

Visual impairment of one or both eyes;

Dizziness and acute headache;

Loss of balance and sudden gait disturbance.

When these symptoms occur, it is necessary to call an ambulance immediately!

The most common symptoms of a stroke are divided into two conditional groups:

General brain symptoms. These are symptoms associated with brain hemisphere injury. These symptoms include dizziness and numbness.

Signs of hearth. These include sudden paresis, paralysis, as well as visual disturbances, pupil displacement, slurred speech, incoordination, excitable neck muscles, and more.

It is very important to be able to correctly perceive the symptoms of the disease, because the treatment will have a positive outcome only if it is started 3-6 hours after the vascular injury. The initial symptoms of a hemorrhagic stroke are bleeding in the brain, while ischemic stroke is associated with the appearance of a necrotic area in the brain. These signs can be detected using instrumental diagnostics, in particular CT, MRI and EEG.

Stroke is diagnosed on the basis of the most important diagnostic studies, in particular computer tomography (CT) and magnetic resonance imaging (MRT). In most cases, it is possible to distinguish between this pathology and other types of "new" brain hemorrhages with the help of computer tomography.

With the help of MRI, it is possible to determine areas of ischemia, as well as to assess the spread of ischemic brain damage. MRT allows to distinguish hemorrhagic stroke from ischemic type, as well as to determine the exact location of the affected area and its size. In addition, MRI can detect other diseases with similar symptoms.

In ischemic stroke, a number of additional studies were conducted, including ultrasound examination of the vessels of the neck and brain (UTT), echocardiography, cerebral angiography.

Summary: general therapeutic treatment of stroke is aimed at normalizing the cardiovascular system, restoring respiratory function, reducing brain swelling, as well as preventing its recurrence and correcting its complications.

In ischemic stroke, blood circulation and the damaged area are restored by means of antiaggregant, anticoagulant, neuroprotector (cavinton, etc.) and nootropic (picamilon) drugs. If necessary, surgical treatment is performed. Normal brain function is supported by antioxidants, vitamins, and drugs to improve tissue metabolism.

In hemorrhagic stroke, angioprotectors, vasoactive drugs were prescribed. The most effective method in the treatment of hemorrhagic stroke is surgical intervention.

A stroke can lead to long-term coma, paralysis, or paresis of muscles in certain parts of the body. A stroke causes cognitive and memory loss. A severe stroke can cause the patient's death. Stroke prevention is carried out by regular blood pressure measurement. People with hypertension should be especially careful and follow all the recommendations of the doctor, such as taking prescribed medications, exercising regularly, and restricting the diet. Stopping smoking and controlling blood sugar levels reduce the chance of developing the disease. It is necessary to rest, work and eat properly, avoid mental and nervous tension, treat vascular diseases in time. Statistics show that the main reason for the severe form of stroke and its development are unhealthy habits such as physical inactivity and sitting too much. Those who live such a slow life are 2.5 times more likely to have a brain hemorrhage than those who regularly do physical education. Therefore, regular sports can prevent not only stroke, but also other diseases.

References:

1. O'zME. Birinchi jild. Toshkent, 2000-yil
2. X. Q. Shodmonov, X. Sh. Eshmurodov O. T. Tursunova. ASAB VA RUHIY KASALLIKLAR. «Bilim» nashriyoti, 2004.