Objective: To study changes of the vegetative nervous system in acute stroke. Methods: 26 patients aged 59.5±3.7 with acute stroke, including 18 patients with ischemic stroke, 8 with TIA, were examined. The analysis of complaints, investigation of the vegetative nervous system of the studied patients were conducted. Results: The symptoms identified during vegetative dysfunction: pain in the heart – 30.8% of patients, tachycardia (more than 100 beats per minute) – 23.1%, arrhythmia (confirmed by ECG data) – 19.2%, tachypnea (more than 18 per minute) – 23.1%, generalized hyperhidrosis – 46.2%, symptoms of anxiety (more than 14 points according to Hamilton Anxiety Rating Scale) – 61.5%, depression symptoms (identified by Mini Geriatric Depression Scale) – 46.2% of patients. The study of cognitive sphere conducted through MOCA was 24.0±2.7. Research of the vegetative nervous system in 3 days after the beginning of the therapy (7 out of 26 patients took psycholeptic) showed preservation of the following symptoms: pain in the heart – 11.5% of patients, symptoms of anxiety – 3.8%, depression symptoms – 23.1%. These manifestations were observed in 3 patients with ischemic stroke and 4 patients with TIA. Conclusions: With the development of acute stroke, pathology, which is characteristic mainly for disorders of the sympathetic nervous system is revealed. The symptoms do not depend on the severity of the disease (group consisted of patients with TIA and acute stroke). Therapy allows to change the state of the vegetative nervous system and correspondingly improve the patient’s quality of life.