

При проведенні мультиваріантного аналізу ризик пізніх подій після АКШ був у 6,24 разу більшим у пацієнтів, які не приймали статини через рік після АКШ, порівняно з особами, що застосовували ці препарати (95 % ДІ 2,313–16,809;  $p < 0,001$ ). Незалежними предикторами виникнення пізніх подій виявились також післяопераційне застосування петльових діуретиків (ВШ 2,186 (95 % ДІ 1,187–4,024);  $p = 0,012$ ) та гірший показник рШКФ при виписуванні зі стаціонару (ВШ 1,366 (95 % ДІ 1,007–1,853);  $p = 0,045$ ).

**Висновки.** Незалежний зв'язок виникнення пізніх подій зі зниженою функцією нирок, застосуванням петльових діуретиків та відсутністю терапії статинами повинен враховуватися при визначенні кратності спостереження та пріоритетів післяопераційного ведення хворих.

### Relation of serum nesfatin-1 levels to silent myocardial ischemia in hypertensive patients

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Nesfatin-1 is a peptide containing 82 amino acids that is synthesized both in the hypothalamus and in the peripheral adipose tissue. During the last decade, a number of studies have proven the anti-inflammatory effect of this cytokine. According to C.H. Tang et al., 2012, increase of nesfatin-1 level reduces the expression of inflammatory genes, including tumor necrosis factor- $\alpha$ , interleukin-1 $\beta$  and IL-6 in brain tissue damage in rats. Bonnet et al., 2009, investigated the relationship between inflammation of the brain and the hypothalamus and activation of the nesfatin-1 expressing neuron. In a study by Ayada et al., 2016, it was shown that intravenous administration of nesfatin-1 leads to vasoconstriction by inhibiting the synthesis of nitric oxide and increases arterial pressure. Thus, it is possible to assume that the decrease in the expression of nesfatin-1 might have a role in the pathogenesis of endothelial dysfunction and acute cardiac events.

**The purpose of the study:** to analyze the relation between the serum level of nesfatin-1 and the presence of silent myocardial ischemia in patients with hypertension (HT).

**Material and methods:** 86 patients with HT underwent 24-hour ECG monitoring. Patients were divided into 2 groups: the first one – 68 people without signs of ischemia. The second group included 18 subjects (21.1 %) with ST segment depression (maximum 2.7 mm for men and 3.7 mm for women). The control group included 12 practically healthy persons adjusted by gender and age. The serum level of nesfatin-1 was determined by the immune enzyme method using the Human Nesfatin-1 ELISA Kit (Kono Biotech Co., Ltd., PRC). Statistical analysis of data was performed using Statistica 6.1 software package for the statistical information processing (Statsoft Inc., USA). Quantitative attributes are presented as

median (Me), values of the upper (UQ) and lower (LQ) quartiles.

**Results.** An intergroup analysis did not reveal a statistically significant difference in age, body mass index, blood pressure (systolic and diastolic), diabetes status and smoking status. The serum levels of nesfatin-1 in patients without symptoms of ischemia were 7.32 (5.21; 8.2) ng/ml, which was significantly higher than in the second group – 5.01 (3.28; 6.44) ng/ml ( $p = 0.03$ ) and in the control group – 4.54 (4.24; 4.87) ng/ml ( $p = 0.01$ ). At the same time, the content of nesfatin-1 in patients with ischemia was not significantly different from that in the control group ( $p = 0.06$ ).

**Conclusions.** the level of serum nesfatin-1 was significantly elevated in patients with hypertension. Low levels of the cytokine in patients within this cohort were associated with the presence of ischemia at 24h ECG monitoring and could be a marker of an unfavorable course of disease.

### Atherosclerotic changes in coronary and cerebral vessels in patients with coronary heart disease

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**The aim** of the study was to assess atherosclerotic changes in coronary and cerebral vessels in patients with coronary heart disease (CHD).

**Methods:** 124 patients with CHD were enrolled: 71.8 % men and 28.2 % women.

Transcranial doppler ultrasonography study of head and neck arteries was performed to 58.1 % of patients. Cerebral angiography and coronary angiography were done to all patient (100 %).

**Results.** The results of transcranial doppler (TCD) ultrasonography showed that all pts (100 %) had stenosis and 79.2 % pts had  $\geq 2$  stenosis. These data were confirmed with cerebral angiography in 93.1 % pts. All patients (100 %) who had coronary artery stenosis at the same time had cerebral artery stenosis. Patients who haven't been detected stenosis with cerebral angiography didn't have stenosis in coronary angiography as well. However, 32.8 % of patients with cerebral artery stenosis did not have atherosclerotic changes in the coronary arteries. According to the results of coronary angiography stenosis had 62.9 % patients, including  $\geq 2$  stenosis in 37.9 % cases. Stenosis of right coronary artery had 38.7 % patients (77 % of them were hemodynamically significant  $\geq 75$  %), stenosis of anterior interventricular branch had 37.1 % patients (65 % of them had hemodynamically significant stenosis  $\geq 75$  %).

**Conclusions.** Coronary heart disease is associated with multifocal atherosclerosis and stenosis in both coronary and cerebral arteries. Meanwhile, most of patients had hemody-