

ISSN 1608-635X (Print)
ISSN 2664-4479 (Online)



Національна академія медичних наук України

Всеукраїнська асоціація кардіологів України

ДУ «Національний науковий центр "Інститут кардіології
імені академіка М.Д. Стражеска" НАМН України»

Український кардіологічний журнал

Ukrainian Journal of Cardiology

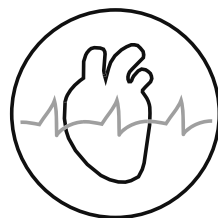
Матеріали XX Національного конгресу кардіологів України

(Київ, 25–27 вересня 2019 р.)

Головний редактор: О.М. Пархоменко

Наукова редакція випуску: М.І. Лутай (голова), Л.Г. Воронков,
С.М. Кожухов, О.І. Мітченко, Л.А. Міщенко, О.Г. Несукай, О.С. Сичов,
Ю.М. Сіренко, Ю.М. Соколов, Т.В. Талаєва, В.О. Шумаков

Том 26 Додаток 1 2019



www.ucardioj.com.ua

Київ • 2019

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

S.V. Ivanchenko, O.M. Kovaleva

Kharkiv National Medical University, Kharkiv, Ukraine

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- α , interleukin-1 β 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

Y. Kushnir, K. Pereplytsia

SI «Dnipropetrovsk Medical Academy of the Ministry of Health of Ukraine», Dnipro, Ukraine

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 ≥ 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 ≥ 2 stenosis in 37.9 % cases. Stenosis of right coronary artery had 38.7 % patients (77 % of them were hemodynamically significant ≥ 75 %), stenosis of anterior interventricular branch had 37.1 % patients (65 % of them had hemodynamically significant stenosis ≥ 75 %).

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

namically significant stenosis. The gender features of the existence of cerebral and coronary artery stenosis were established, advantage of men. It was determined that cerebral artery stenosis is not always associated with coronary stenosis.

The link between ischemic heart disease risk factors, platelet dysfunction and aspirin resistance

Y.H. Kyyak, O.Ye. Labinska, M.P. Halkevych,
H.Y. Kyyak, O.Y. Barnett

Danylo Halytsky Lviv National Medical University, Lviv, Ukraine

Aspirin resistance (AR) most often occurs in ischemic heart disease (IHD) patients with risk factors such as heredity, senile age, sex, diabetes mellitus (DM), hypertension, obesity, occupational hazards and smoking. Aspirin prevents platelet (Pl) aggregation with their preserved functional capacity. The signs of decreased Pl reactivity deserves further research.

Purpose. To evaluate thrombocyte ultrastructure and function in patients with ACS in order to reveal the mechanism of AR.

Methods. In the study were included 38 patients with the history of acute myocardial infarction (AMI) admitted to the cardiology department of Lviv Clinical Emergency Care Hospital during the last 5 years. The Pl were isolated by centrifugation of citrate blood, separated and subsequently fixed in 1 % solution OsO₄ according to Barkagan's method (1999 yr). Pl ultrastructural examined by electron microscopy ($\times 6000$).

Results. Patients were divided into 2 groups. The main group was a cohort of 28 patients with clinical evidence of AR (19 males and 9 females, average age 54 years ± 12 (range 42–68 yr.). These persons had different IHD risk factors and features of ACS, such as repeated AMI, stent thrombosis. The control group comprised 10 patients with uncomplicated AMI without clinical evidence of AR, average age 64 years ± 12 (range 52–78 yr.). In the patients of control group 90 % of Pl were activated, with pseudopodia presence and thrombocyte granules concentration in their central part, with clearly preserved functional capacity. In the main group 80 % of Pl were aggregated, osmiophilic, vacuolyzed with pseudopodia microclasmotosis and showed evidence of calcification and apoptosis. All these ultrastructural changes represent their reduced functional capacity and AR.

Conclusions. We have shown a link between Pl ultrastructural degeneration which reflects their aspirin resistance and depends on IHD risk factors. We also have found for the first time that the clinical evidence of AR correlates with the presence of Pl destruction, their increased adhesive properties, cytoplasm vacuolization and tendency to apoptosis.

The interrelationship between the coronary heart disease's course and community-acquired pneumonia (the retrospective analysis data)

N.S. Mykhailovska, T.O. Kulynych, V.A. Morguntsov

Zaporizhzhia State Medical University, Zaporizhzhia, Ukraine

Objective – to investigate the effect of the community-acquired pneumonia on the clinical course of coronary heart disease and the frequency of major cardiovascular events incidence based on the retrospective analysis results.

Methods. The retrospective analysis of 203 case histories of patients with CHD (median age 73 years (63.00, 80.50), score on the PSI/PORT – 80 (69; 93)), hospitalized in the therapeutic department because of CAP was performed. The study of the main cardiovascular events was conducted with each patient or his relatives through telephone conversations. The data on readmission and reference of the patient to medical institutions in the consequence of arrhythmic complications, progression of heart failure, destabilization of coronary artery disease within 1 year after the transmitted pneumonia were considered. By cumulative endpoint attributed all fatal and nonfatal cardiovascular events that occurred during the year after CAP.

Results. In total, in patients with CHD during 1 year after the transferred CAP 104 cardiovascular events were recorded, 37 (18.23 %) patients needed the re-hospitalization. The most common causes of health aggravation in patients with CHD after CAP were the rhythm and conduction abnormalities, the occurrence or decompensation of preexisting heart failure and deterioration of angina pectoris. Of the hospitalized patients, 20 (62.5 %) had a combination of 2 or more of the complications noted. The development of acute myocardial infarction was observed in 3 (1.48 %) patients at 7 and 9 days from the moment of admission for hospitalization. The arrhythmias, acute myocardial infarction and decompensation of heart failure were observed with the same frequency in patients of all groups, regardless of the severity of pneumonia and the risk of mortality on the PSI/PORT scale. There were not found the impact on the development of adverse cardiovascular events in patients with CHD after CAP such factors as male gender, presence of anamnesis of transmitted MI, arterial hypertension, angina pectoris III–IV FK, previous arrhythmic disorders, and also such traditional factors as smoking and diabetes mellitus.

Conclusions. The community-acquired pneumonia exerts an adverse effect on the clinical course of coronary heart disease by increasing the functional class of angina, heart failure progress and the development of arrhythmic; the most common cause of the lethal outcome in patients with coronary heart disease after community-acquired pneumonia is acute heart