**Poprygo M.V., Mardanov B.U. Features of the hospital course of myocardial infarction in patients with impaired carbohydrate metabolism**

International Heart and Vascular Disease Journal. 2015; 7: 26-33

**Resume**

**Objective.** To study the influence of concomitant diabetes mellitus (DM) on the course of myocardial infarction with the ST segment elevation (STEMI) and hospital prognosis for patients.

**Material and methods.** The study included 83 patients with STEMI, admitted in 2014. Patients were analyzed in 2 groups: group I — pa-tients with type 2 diabetes (n = 38; average age 58,4 ± 8,1 years; male / female — 28/10); and group II — patients with normal carbohydrate metabolism (n = 45; average age 59,9 ± 7,2 years; male / female — 32/13). We studied the baseline clinical and hemodynamic laboratory parameters of patients, as well as hospital prognosis of MI.

**Results.** Comparative analysis showed that among patients with diabetes, hypertension occurred significantly more often as the background of the disease, and the middle class of acute heart failure according to the Killip classification was significantly higher at the admission time in patients of the first group. Ventricular arrhythmias of the heart: couplets, group PVCs, unstable paroxysms of ventricular tachycardia were detected in 2.5 times more frequently in patients with STEMI and DM. In addition, patients with diabetes were characterized by relatively severe dilation of the cavity of the left ventricle (LV) and the left atrium, at relatively low values of LV ejection fraction. During the period of hospital treatment in patients with STEMI and the type 2 diabetes, more cases of early post-infarction stenocardia (11 %) and of acute left ventricular aneurysm were recorded (9 %), (both p> 0.05), while the prevalence of the hospital mortality cases.

**Conclusion.** The presence of concomitant diabetes burdens the course of STEMI, manifesting by a pronounced left ventricular dysfunction, a high risk of ventricular arrhythmias and cardiac complications of acute myocardial, associated with a trend to an increase in index of hospital mortality.

**Key words**

Myocardial infarction, diabetes mellitus, hospital prognosis

**Mehmet Onur Omaygenc, Ouuz Karaca, Mahmut Yesin, Ekrem Guler, Mustafa Tabakci, Ramazan Kargin. A rare case of variant angina: Single coronary artery arising from right sinus of Valsalva**

International Heart and Vascular Disease Journal. 2015; 8: 34-37

**Abstract**

Anomalous origin of a coronary artery from opposite sinus Valsalva is considerably rare. Although intertruncal course, acute take-off angleandco-existing atherosclerosis aremaj or causes of ischemic events in this popula-tion, vasospastic angina should also be appreciated. Documenting transient ST segment elevations on ECG and excluding other possible reasons with conventional and CT coronary angiograms may result in this diagnosis. Tothe best of our knowledge this is the first case in the literature reporting Prinzmetal’s phenomenon of a single coronary arterya rising from right sinus Valsalva.

**Keywords**

Variant angina, single coronary artery, coronary anomalie

**Starodubova A.V., Kislyak O.A. Coronary heart disease in women.**

International Heart and Vascular Disease Journal. 2016; 9: 9-13

**Summary**

Cardiovascular disease (CVD) represents the leading cause of death among women as well as men. The number of deaths due to CVD in women are greater than in men. There are significant gender-related differences concerning CVD. It is less known about CHD in women than in men. There is a need to develop a risk score scale for women in Russia, and for further investigations in the field of treatment and prevention of CVD in women.

**Keywords**

Coronary heart disease, cardiovascular disease, gender differences, women

**Kuznetsov V.A., Yaroslavskaya E.I.**

**Nonspecific cardiac morphofunctional syndromes in patients with coronary artery diseases.**

International Heart and Vascular Disease Journal. 2017; 13: 13-19

**Summary**

**Objective.** To state the concept and classification of nonspecific cardiac morphofunctional syndromes in patients with coronary artery disease (CAD) using the analysis of major comparative cross-sectional studies’ results.

**Material and methods.** Data of “Register of coronary angiography procedures” – electronic database including results of of 20.402 consecutive patients’ clinical profiles.

**Results.** Heart ventricles dilatation in CAD patients without myocardial infarction, functional mitral regurgitation andasymmetric left ventricular hypertrophy in stable CAD patients revealed by echocardiography characterize particular types of cardiac remodeling.

**Conclusion.** These cardiac morphofunctional syndromes are often conditioned by mixed pathology and they are not alwaysdirectly related to obstructive coronary atherosclerosis. We suggest calling these changes nonspecific cardiacmorphofunctional syndromes.

**Key words**

Coronary artery disease, echocardiography, nonspecific cardiac morphofunctional syndromes

**Sapozhnikov A.N., Leonova E.E., Danilova K.S., Jahina G.Kh.**

**Endocrine system pathology as the risk factor of acute coronary syndrome without ST segment elevation in intact coronary arteries.**

International Heart and Vascular Disease Journal. 2017; 13: 19-23

**Summary**

**Objective.** Investigate endocrinological pathologies associated with acute coronary syndrome (ACS) in case of intact coronaryarteries.

**Materials and methods.** We examined 168 patients with the diagnosis of acute coronary syndrome and analyzed the results of routinelaboratory tests including carbohydrate metabolism and thyroid function parameters.

**Results.** In case of suspected ACS females have intact coronary arteries more often than males. More than 90% of thisgroup of patients have arterial hypertension, often they have dyslipidemia, arrhythmias, history of old myocardialinfarction. Myocardial infarction’s possibility appears more often when there is concomitant diabetes mellitus.

**Conclusion.** Females under 75 years old with thyroid gland pathology, impaired carbohydrate metabolism and elevated bloodpressure have higher possibility to develop ACS without ST segment elevation in intact coronary arteries. It isreasonable to include thyroid hormone blood levels estimation into standard ACS diagnostic algorithm and intactcoronary arteries detection.

**Key words**

Acute coronary syndrome, intact coronary arteries, arterial hypertension, hypothyroidism, diabetes mellitus, fe-males under 75 years old.

**Mahmoud Shawky Abd-El Moneum.**

**Assessment of the relation between pulmonary hypertension severity and left ventricular diastolic dysfunction in patients with ischemic heart disease.**

International Heart and Vascular Disease Journal. 2019; 22: 12-17

**Background.** Association between pulmonary hypertension and left ventricular (L.V.) diastolic dysfunction in pa- tients with ischemic heart disease has been observed. However, the relation between the severity of pulmonary hypertension and left ventricular diastolic dysfunction is still unclear.

**Objectives**. To explore the relationship between pulmonary hypertension severity and L.V. diastolic dysfunction in patients with ischemic heart disease.

**Patients and methods.** 200 symptomatic patients with ischemic heart disease were included in this study. History taking, clinical examination, and echocardiography were performed to all patients, LV dimensions, systolic and diastolic function, and systolic pulmonary artery pressure (SPAP) were measured. We characterized the patients into two groups as indicated by the presence or absence of diastolic dysfunction.

**Results.** Patients with diastolic dysfunction had significantly higher SPAP (p < 0.00001), and significantly higher incidence of severe pulmonary hypertension (p = 0.034). Autonomous indicators for the presence of severe pulmo- nary hypertension were E/E\ > 15, E/A< 1 and E-wave DT < 160.

**Conclusion.** patients with ischemic heart disease in addition to left ventricular diastolic dysfunction had a higher systolic pulmonary artery pressure and a higher incidence of severe pulmonary hypertension. Systolic pulmonary artery pressure was essentially connected with LV diastolic dysfunction.

**Key Words**

Left ventricular diastolic dysfunction, pulmonary hypertension