# Atherosclerosis and Dyslipidaemias An official Journal of the Russian National Atherosclerosis Society (RNAS) 2012 Nº4 (9) ABSTRACTS

### Evolution of the knowledge about pro-and antiatherogenic properties of lipoproteins

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#### Abstract

The review describes results of clinical and experimental studies concern lipoprotein characteristics and shows relationship between lipoprotein's plasma concentration and the rate of cardiovascular morbidity and mortality. However, new studies data analysis demonstrated that not only concentration but functional activity and chemical characteristics of lipoproteins influence on atherosclerosis. In general, the results of many scientific studies show the relevance of cholesterol model of atherosclerosis. **Keywords:** atherosclerosis, atherogenic lipoproteins, anti-atherogenic lipoproteins.

# Secretory phospholipase A2 and the development of atherosclerosis.

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#### Abstract

It is well known that inflammation plays an important role in the etiology and pathogenesis of atherosclerosis. At the present time one of the inflammatory markers secretory phospholipase A2 (secPLA2) is actively investigated. The published data indicate that a high level of secPLA2 group IIA (secPLA2-IIA) is a predictor of cardiovascular events in patients with acute coronary syndrome and stable coronary artery disease. In addition to the concentration of secPLA2-IIA the activity of secPLA2 is also a predictor of adverse cardiovascular events s. However published studies are contradictory and therefore in this review the clinical trials results systematization has done.

Keywords: secretory phospholipase A2 group IIA, coronary atherosclerosis.

# The cholesterol level in Russian adults aged 20-70 years

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# Abstract

The results of the large cholesterol screening survey (n=52075) were analyzed. 2,5-97.5% approximate reference limits, 75 percentiles and medians of total cholesterol in male and female different age groups from 20 to 70 years were evaluated. The medians of total cholesterol in all male age groups over 30-35 years and in all female age groups over 35-40 years exceeded the upper desirable limit of cholesterol <5.0 mmol/L. The use of total cholesterol measurement in the screening studies as an indicator of cardiovascular risk is discussed.

Keywords: cholesterol, age reference intervals, desirable limits.

# Associations between the level and activity of secretory phospholipase A2 group IIA and the severity of coronary atherosclerosis.

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#### Abstract

Aim: To determine the influence of the secretory phospholipase A2 group IIA (sPLA2-IIA) on the severity of coronary atherosclerosis.

Methods: We studied patients (n = 271), who underwent coronary angiography. They were divided into 3 groups by the number of affected coronary arteries and the control group. Risk factors for cardiovascular disease, the level and activity of sPLA2-IIA and C-reactive protein (CRP) were determined.

Results: The level of sPLA2-IIA increased with increasing number of affected arteries (p = 0,03). Activity of sPLA2 has tendency to increase with increasing number of affected arteries (p = 0,07). The high density lipoprotein decreased with increasing degree of coronary atherosclerosis (p = 0,0008), and the level of leukocytes increased (p = 0,03). CRP level was not significantly different between the groups, but correlated with the concentration of sPLA2-IIA (r = 0,32).

Conclusion: The increase of the severity of coronary atherosclerosis is associated with a significant increase of the level of sPLA2-IIA.

**Key words:** coronary atherosclerosis, secretory phospholipase A2 group IIA, high density lipoprotein, C-reactive protein.

# Combination of thrombolytic therapy and percutaneous coronary interventions in treatment of ST elevation myocardial infarction.

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#### Abstract

This study was done to evaluate the results of a combination of thrombolytic therapy (TLT) and percutaneous coronary interventions (PCI) at the first day of the ST-elevation myocardial infarction (STEMI). We included 90 patients, which received prehospital TLT earlier 6 hours of development of chest pain and were referred to subsequent PCI. Reperfusion after 90 min of TLT was successful in 51 patients, so PCI in these cases were facilitated. In another 31 patients we couldn't find signs of reperfusion, so PCI in these cases were rescued. Inhospital outcomes were successful in all cases, all patient were alive and discharged. Repeat PCI were successfully performed in 1 case at 7 day after initial treatment. During follow-up to 12 month 5 patients (6%) died, 12 patients (13%) had repeat angina and they had repeat revascularization procedures (11 PCI and 1 CABG). 73 patients (81%) till 12 months were event-free of any complications.