Table 1: Demographic and clinical characteristics of the study groups

	Slow coronary flow			Normal coronary artery			p
	n	%	Mean±SD/Median (Q₁-Q₃)	n	%	Mean±SD/Median (Q₁-Q₃)	
Age (years)			57±10			54±9	0,25
Sex							
Male	17	53		18	56		0,81
Female	15	47		14	44		
Diabetes mellitus	7	22		10	34		0,27
Hypertension	18	56		18	62		0,64
Hiperlipidemi	16	50		8	28		0,07
Smoking	13	40		8	28		0,28
Systolic blood pressure (mmHg)			130 (120-160)			132 (130-155)	1
Diastolic blood pressure (mmHg)			80 (60-95)			80 (60-95)	0,21
Fasting serum glucose (mg/dl) (mg/dl)			99 (65-171)			101 (76-201)	0,17
Creatinin (mg/dl)			0,84 (0,5-1,3)			0,8 (0,5-1,4)	0,57
Total cholesterol (mg/dl)			192±30			190±33	0,76
LDLcholesterol (mg/dl)			123±26			108±30	0,056
HDL cholesterol (mg/dl)			40±10			48±15	0,03
Triglycerides (mg/dl)			133 (67-409)			147 (46-310)	0,54
Hemoglobin (g/dl)			13,7±1,3			13,4±1,5	0,42
Leukocytes (103/mm3)			8,6±2,1			7,4±1,7	0,02
TFC-LAD			43,5(29-52)			31,5 (25-36)	<0,001
TFC-CX			33 (20-40)			21 (17-25)	<0,001
TFC-RCA			32 (18-38)			20 (14-26)	<0,001
Urotensin (pg/ml)			122 (71-831)			95 (21-635)	<0,001

PP-303

Relation Between Red Cell Distribution Width and Severity of Coronary Artery Disease in Patients With Acute Myocardial Infarction

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Objective: Increased red blood cell distribution width (RDW) has been associated with adverse outcomes in acute myocardial infarction (AMI). We evaluated the relationship between RDW and severity of coronary artery disease (CAD) in patients with AMI.

Methods: A total of 580 consecutive patients who were routinely referred to coronary angiography for AMI were included in the study. We analyzed the relation between RDW and angiographic severity of CAD. Syntax score (SS) was used to evaluate the severity of atherosclerosis.

Results: Patients (n=580) with elevated Syntax scores (SSs >32) had higher RDW values (15.1%±1.7% vs 14.1±1.7%, p<0.001). The SS was positively correlated with RDW level (r=0.252, p<0.001) and neutrophil/lymphocyte (N/L) ratio (r=0.178, p<0.001). There was a mild significant association between RDW level and N/L ratio (r=0.106, p=0.033). In the multiple logistic regression analysis, RDW (odds ratio = 1.165, 95% confidence interval 1.02-1.32, p=0.021) remained a significant predictor for the severity of CAD.

Conclusion: Red blood cell distribution width, an inexpensive and easily measurable laboratory variable, is independently associated with the severity of CAD in patients with AMI.
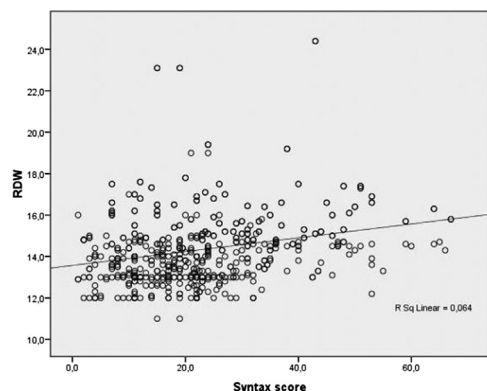
PP-304

Current Data for CVD in Bosnia and Herzegovina and Experience with Our Own Guidelines

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We want to underline that Bosnia and Herzegovina (B&H) was the first country in East Europe and fourth in Europe that implemented European recommendations for CVD prevention and HeartScore. We finished the Updated version of HeartScore Bosnia&Herzegovina and launched it in the year 2008. Nevertheless, epidemiological data of cardiovascular disease (CVD) in B&H are in red alert and we have to state that CVD has an overall increase curve. Epidemiological data of CVD in B&H are as follows: overall mortality in B&H in 2011.y was of 53% (compared with 51% in 2008.y). In Bosnia and Herzegovina ($\sim$ 4,100.000 inhabitants) CVD mortality rate according to adjusted data is 578/100000, and CVD morbidity over 11.800/100000, absentism over 55%, invalidity over 59%, and out of all health expenses CVD takes 30-54%. Our economical data are not encouraging; GDP (2010.y) was 18,2 bill.US$, real growth rate per year less than 1,5%, with tendency of further decreasing. Health care expenditure per capita is approx. 200 Euro (275 US$) and this is major limitation for serious and overall prevention actions, as well as action due to education and treatment. In the last ten years we invested in brand new cardiovascular tertiary level centers over 100 mill. Euro and in preventive programs less than 0,5 mill.Euro. Despite this discouraging data we have had decided to start with program of public campaign and program of issuing our own Guidelines for Patients, i.e. Guidelines for Arterial hypertension; Tobacco smoking; Obesity; Plasma lipids, and Guideline - Count Your CVD Fatal Risk by Yourself. The main idea and goals: to give just basic facts, to adjusted data and messages for average level of education, to made them understandable, and to avoid too professional medical vocabulary. All important messages in capital letters and underlined. Our further plans: Guideline for physical activity, Guideline for cardiometabolic risk, Guideline for heart and blood vessels diagnostic methods, Guideline for heart and blood vessels drugs, Guideline for interventions on blood vessels, Guideline for heart and blood vessels surgery. What we need to do: to improve identification of high risk individuals and to improve clinical approach. What are our priorities: prevention, population based education, hospital facilities and equipment on the secondary level, and primary and secondary CVD treatment. What is unacceptable; Insufficient support for preventive programs.

PP-305

C-reactive Protein, Immunoglobuline E and Natural Killer" Cells in Patients with Coronary Artery Disease

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Stability of atherosclerotic plaque is determined by multiple factors, as are immunological and inflammatory ones. Natural killer cells (NK) have proinflammatory property and ability of direct contribution to vascular lesion. Immunoglobulin E (IgE) could be involved in late atherosclerotic phases, improving plaque unstability and clinical events. Increased values of IgE are in different cardiovascular disease, especially in patients with unstable angina pectoris and ACS.

AIM: To determine CRP, IgE, NK cell values in patients with CAD proven by elective coronary angiography. Methods and patients: It was prospective study with 150 patients divided in 3 groups based on coronarography findings according to severity of coronary artery stenosis severity. I group includes patients with significant coronary artery stenosis >70%, II group included patients with coronary artery stenosis <70%, and the III group included patients without verified stenosis of coronary artery All patients, admitted on elective coronary angiography, with previous diagnosis of angina pectoris. From the study were excluded all the patients with diagnosis of acute inflammation, Diabetes mellitus, allergic, chronical inflammatory and atopic and malignant disease.

Results: In our study in I patien t group with coronary significant stenosis > 70% (meaning that atherosclerotic plaque includes 70% of artery lumen), concentration of CRP in serum was significantly higher according to II patient group with stenosis of <70%, and III group without verified stenosis of artery. Serum concentration of CRP between II (stenosis <70%) and III group without coronary artery stenosis proved by coronary angiography was almost equal. CRP value range in I group (>70% significant coronary artery stenosis) was 1,0-14,9 mg/dl, in II group (<70% coronary artery stenosis) was 0,4-5,5, and in III group (no verified coronary artery stenosis) was 0,2-3,7 mg/dL. Also in our study we found out IgE being higher in patient group >70 % with significant coronary artery stenosis, comparing it with patient group <70% of coronary artery stenosis, and with patient without verified stenosis. In our study NK cell representation in no verified coronary artery stenosis group of patient was significantly lower than in group with stenosis >70% or <70%.

Conclusion: Serum concentration of CRP implies fact of CRP being predictor of acute inflammation, and active atherosclerotic process. IgE could be hint of acute myocardial infarction, but in the same time high values could have protective role. NK cells has specific role in process of atherosclerosis, since being higher in coronary artery stenosis. CRP test has the best sensitivity and specificity, and therefore is the most beneficial and applicable in diagnostics.

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