n=156). Red cell distribution width (RDW), neutrophile-lymphocyte ratio (NLR) and peak high sensitive C-reactive protein (hs-CRP) levels were measured. We also evaluated in hospital clinical course of the patients.
Results: RDW, NLR and peak hs-CRP levels were significantly lower in patients with lead endocarditis when compared with non-lead endocarditis (14,8 ± 1,6 versus 16,7 ± 3,1, p=0,01, 2,9 ± 1,07 versus 7,4 ± 7, p=0,01 and 22,4 ± 31,3 versus 58,6 ± 69, p=0,03 respectively). In hospital mortality was similar in two groups (11.7% versus 30.1%, p=0.11). Ejection fraction was lower in the group with lead endocarditis (49,7% ± 14,4 versus 55,6% ± 9.8, p=0.03) however, clinical congestive heart failure was more common in the non-lead endocarditis group (28,2% versus 5,8%, p=0.004).
Conclusıon: In hospital mortality was similar in patients with lead and non-lead left sided endocarditis. Inflammatory markers such as RDW, NLR and hs-CRP were lower in lead endocarditis. Additionally despite of lower ejection, clinical congestive heart failure development was less in lead endocarditis which all should alert physicians that lead endocarditis might have more silent course and might be omitted.

Pediatric Cardiology

PP-242

Long Term Outcome of Arterial Switch for Transposition of Great Arteries in Tunisian Children. First Experience in an Emergent Country

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Introductıon: After its introduction by Jatene and colleagues in 1975, the arterial switch operation (ASO) has become the surgical technique of choice for correction of transposition of the great arteries (TGA) with or without ventricular septal defect (VSD). Short- and mid-term results are promising, but data on long-term outcome are limited and major complications may occur.
Objectıves: Our work is intended to assess the long term results of ASO in Tunisian children with TGA and to identify potential factors affecting these results.
Methods: We studied 44 patients with ASO (mean age: 11.5 years, 73%-male, 50 % TGA with VSD) followed at our department. The inclusion criterion was at least 5 years of follow-up. Complete clinical examination, standard and 24-hour Holter electrocardiogram, M-mode, 2D-and color Doppler echocardiography and coronary investigations were performed.
Results: Mean follow-up was 106 months (8.83 years). One patient died (2.27%). Impaired left ventricular function was observed in 5 cases (11.36%). Right ventricular outflow tract obstruction was observed in 6 patients (13.63%) requiring reintervention in 2 cases. Pulmonary regurgitation was frequent (40.90%). Aortic regurgitation was observed in 20 patients (45.45%) but appeared not to be progressive. Coronary lesions were found in 4 patients (9.09%) requiring a coronary artery bypass graft (CABG) in 1 case. Intramural coronary artery course was the risk factor of late coronary arteries lesions (p=0.013) Freedom from late reintervention was 84% at 15 years after ASO. Eight late reinterventions were performed in 4 patients (9.09%) with a mean age of 10.43 years.
Conclusıon: The TGA, including complex types, can be corrected with good long-term outcomes by ASO. The association to a VSD was not considered to be a predictor of long-term complications except of aortic regurgitation. Right ventricular outflow tract dysfunction was the main reason for late reinterventions. Potential risk of myocardial ischemia requires regular appropriate follow up.

Lipid

PP-243

Relation of Serum Testosterone Levels to High Density Lipoprotein Cholesterol and Triglyceride in Men

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Background: Low HDL cholesterol (HDL-C) levels are now recognized as an independent cardiovascular risk factor and comprise part of the metabolic syndrome. Low testosterone (T) levels are a common finding in men with coronary artery disease.
Methods: The relationship between endogenous plasma testosterone and high-density lipoprotein cholesterol (HDL-C) was assessed among 933 men (27-74) years old originally recruited for an cross-sectional study of endogenous testosterone and coronary artery disease (CAD). Patients underwent coronarygraphy and at the same time, serial testosterone was measured, triglycerides, total-and HDL-cholesterol.
Results: Patients (coronary narrowing >50% n = 689) were compared to those without significant stenoses (n = 244). High-density lipoprotein cholesterol (HDLC) and triglyceride were both significantly associated with the presence of CAD (p<0.05). Testosterone (mean 5.568±2.109 nmol/l range 0.106 – 14.108 nmol/l) correlated directly with HDL-cholesterol (r=0. 0.358, < P=0.0500) and inversely with triglycerides (r=-0.069, p<0.0010),but not with LDL-cholesterol (r=0.140, p=0.1990) total cholesterol (r=-0.036, p<0.820),
Conclusıons: These findings suggest the positive association between levels of testosterone and HDL cholesterol, The negative association between levels of testosterone triglyceride.

PP-244

Low HDL Cholesterol Situations is Characterised by Elevated Oxidative Stress

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Background: Low circulating levels of high density lipoprotein-cholesterol (HDL-C) is the most common form of dyslipidemia in coronary heart disease (CHD). In previous studies, it has been shown that low circulating levels of HDL-C is a strong, independent risk factor for premature atherosclerosis and CHD. Plasma HDL-C particles exert potent anti-atherogenic and anti-inflammatory activities in addition to antioxidant activity. Thus, we aimed to investigate biochemical parameters associated with oxidative stress stress in low HDL-C.
Method: This study included 33 consecutive patients with low HDL-C (≤35 mg/dl) (18 male, age 55±13 years) and 33 age and sex-matched control subjects with normal HDL-C (>35 mg/dl) (17 male, mean age 58±13 years). We evaluated clinical parameters and laboratory parameters which are associated with oxidative stress such as total oxidative status (TOS), total antioxidant capacity (TAC), oxidative stress index (OSI), uric asit, gamma glutamyl transferase (GGT) and alkaline phosphatase (ALP).
Results: Groups were comparable in demographic and clinic characteristics. Except for ALT levels routine laboratory tests were similar in both groups. ALT levels was higher in low HDL-C patients than in subjects with normal HDL-C (29±19 vs 18±5.3 mg/dl, p<0.01). Triglyceride (TG) levels were higher in low HDL-C group, total cholesterol (TK) and low density lipoprotein (LDL) levels were significantly higher in control group. HDL-C levels was lower in patients group than in control group (30±3 vs 48±7 mg/dl, p<0.01). Uric asit (6.3±1.5 vs 4.5±1.3, respectively p<0.01) and GGT levels [35 (10-122) vs 23 (11-71.6), p=0.02] were significantly higher in low HDL-C group than in control group. TOS levels were significantly higher in low HDL-C group than in control group [2.95 (0.01-7.26) vs 1.17 (0.80-1.80), p<0.01], TAC levels were significantly lower in low HDL-C group than in control group [1.15 (0.08-2.25) vs 1.99 (0.42-6.21), p<0.01]. OSI levels [474 (1.19-5050) vs 176 (28-597), p=0.06] were slightly higher in HDL-C group although it is not significant.
Conclusıon: Our findings show that oxidative stress levels increase in patients with low HDL-C. From this aspect, treatments that increase HDL levels or improve the antioxidant status in low HDL-C patients might be reasonable to slow down the process of oxidative stress. However, this result needs to be validated in large-sized studies.

PP-245

Plasma Catestatin Concentration is Independently Correlated with High-Density Lipoprotein Cholesterol Levels in Untreated Hypertensive Patients

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Purpose: Catestatin (CST), a novel peptide derived from Chromogranin A, has diverse cardiovascular actions in addition to diminished sympathoadrenal flow. We intended to investigate metabolic and vascular associations of CST.
Methods: We evaluated plasma catestatin, lipid parameters, left ventricular mass, carotid intima-media thickness (CIMT) and flow-mediated dilation (FMD) of brachial artery in a group of 109 consecutive untreated hypertensive patients.
Results: Catestatin levels were significantly higher in females. Among all study parameters age (r=0.280, p=0.001), high density lipoprotein (HDL) (r=0.426, p<0.001) positively whereas triglycerides (r=-0.317, p=0.002), hemoglobin (r=-0.273, p=0.010), and left ventricular mass (r=-0.230, p=0.034) negatively correlated to plasma catestatin. We could not detect an association between vascular parameters and catestatin. We also documented increased CST concentrations in previously untreated hypertensive patients compared to healthy controls (2.27 vs. 1.92 ng/ml, p=0.004). Multiple linear regression analysis revealed age (Beta: 0.201, p=0.041) and HDL cholesterol (Beta: 0.390, p<0.001) as independent correlates of plasma catestatin concentration.
Conclusıon: We documented that catestatin is correlated with high density lipoprotein concentrations among several metabolic, vascular and biochemical parameters, in previously untreated hypertensive patients. The physiology and clinical significance of this association remains unknown and requires further studies to be identified.

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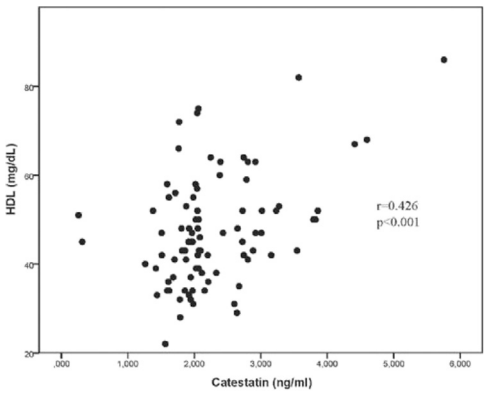

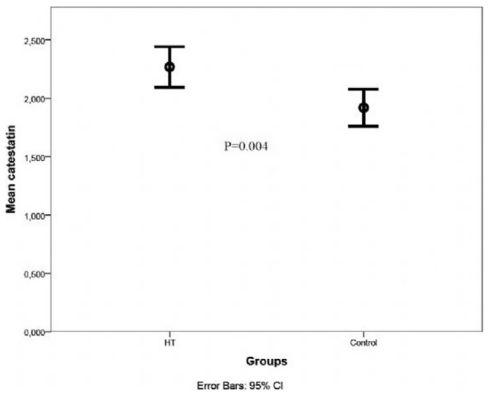

Linear regression analyses were used for prediction of plasma catestatin levels

Linear regression analysis	Dependent variable: Plasma catestatin level			
Independent variables	*P value	Beta (standardized)	†P value	Beta (standardized)
Age, years	0.006	0.277	0.041	0.201
Gender, male	0.381	-0.133		
HDL, mg/dL	0.381	-0.133	<0.001	0.390
Triglycerides, mg/dL	0.381	-0.179		
Hemoglobin (mg/dL)	0.837	-0.028		
Left ventricular mass (g)	0.189	-0.147		
Constant	0.055	-	0.737	-
Adjusted R2	0.268		0.202	

Linear regression analysis with enter method was used for all relevant independent variables which were included if they were significantly different in the univariate analyses*. In addition the analysis was repeated after a pre-elimination with Stepwise method for the independent variables†.

PP-246

Evaluation of Dose Efficacy of Treatment with Atorvastatin, Rosuvastatin And Simvastatin in Patients with Hyperlipidemia

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Objectıve: Atherosclerotic heart diseases continue to be the most important cause of death in developed countries. Hyperlipidemia is the most crucial risk factor in atherosclerosis development. The statins used in hyperlipidemia treatment play an essential role in reducing the morbidity and mortality associated with atherosclerosis. There are numerous studies on old generation statins and new generation statins; however, there are limited number of studies comparing these two groups. Therefore, we aimed to present this study to the literature and determine the dose efficacy of hypolipidemic agents by comparing the old generation statin simvastatin to new generation statins (atorvastatin, rosuvastatin).

Methods: This study is a clinical, prospective cohort study. A total of 160 subjects (76 women and 84 men) who applied to our clinic from November 2011 to May 2011 and were indicated for medicinal treatment according to National Cholesterol Education Programme Adult Treatment Panel (NCEP ATP) 3 criteria despite the four week long first line diet were included in the study. Following the evaluation of lipid profiles based on medical history, physical examination, and clinical and laboratory findings, eligible subjects were assigned to the three groups according to simvastatin dose (10 mg, 20 mg, 40 mg/day), three groups according to atorvastatin dose (10 mg, 20 mg, 40 mg/day) two groups according to rosuvastatin dose (10 mg, 20 mg/day). Thus, a total of 8 groups were generated. There were 20 patients in each group. In our study, the subjects were evaluated with clinical and laboratory methods at baseline and after 6 weeks of treatment.

Results: The mean age of the 160 patients enrolled for the study was 58.95±10.22 (37 to 82). There was no difference between the groups with regards to demographic characteristics. The reduction in low-density lipoprotein (LDL) cholesterol was 28-40% (10-40 mg/day) with simvastatin, 39-51% (10-40 mg/day) with atorvastatin and 50-60% (10-20 mg/day) with rosuvastatin after 6 weeks of treatment ($p<0.01$). The increase in high-density lipoprotein (HDL) cholesterol at week 6 compared to baseline was most prominent in the rosuvastatin (20 mg/day) group.

Conclusıon: We detected that the hypolipidemic effects of rosuvastatin and atorvastatin were more prominent compared to simvastatin. This supports the idea that new generation statins may be used in clinical practice to a further extent compared to old generation statins. Furthermore, based on the findings of our study it can be concluded that rosuvastatin may be the preferred choice of treatment in hyperlipidemia patients with low levels of HDL-C.

PP-247

Myocardial Infarction and Death Following Receipt of Clavis Panax

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Coronary artery disease (CAD) is a chronic process that begins early in life and progresses silently before becoming symptomatic. Besides scientifically based medical treatment of this disease, patients frequently make use of alternative medicine. The product sold as Clavis Panax that used by many people as a food supplements according to the advertisements. Intake of a mixture of plant extracts may have serious consequences in humans as drug interactions and side effects are unknown. Herein, we report the case of a 58-year-old man who presented with chest pain. Due to typical symptoms a coronary angiography and stent implantation was performed to the critical lesions at the left anterior descending artery and right coronary artery successfully. Initially his LDL level was 87 mg/dL, total cholesterol level was 154 mg/dL and triglyceride level was 165 mg/dL. Three months later after he was discharged, he gave up his medication and started to take an herbal drug called Clavis Panax. At the sixth month after stent implantation, his LDL level was 224 mg/dL, total cholesterol was 388 mg/dL and triglyceride was 365 mg/dL. He was warned to stop taking Clavis and was prescribed an increased dose of statin but he refused. He died of a myocardial infarction in the eighth month after stent implantation.

PP-248

Effects of CoQ10 Supplementation on Serum Lipoprotein, Il-6, ICAM-1 and Plasma Fibrinogen in Hyperlipidemic Patients with Myocardial Infarction

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Because,dyslipidemia,inflammation and hypercoagulation are the major risk factors for cardiovascular diseases we examined the Effects of CoQ10 supplementation on serum lipoprotein, Il-6, ICAM-1 and plasma fibrinogen in hyperlipidemic patients with myocard infarction. In a double blind placebo controled clinical trial, 52 hyperlipidemic patients with myocard infarction and age range of 35-70 years were randomly allocated to receive daily 200 mg coQ10 or placebo for 3 months. Fasting blood, Physical activity and daily dietary intake were obtained at beginning and end of 3 months. SPSS version 18 were used for statistical analysis. At the end of study in CoQ10 group,There were significant decrease in total cholesterol (TC), Triglyceride (TG), LDL-c, LDL-c/HDL-c and TC/HDL-c ($p<0.05$), IL-6 ($p<0.001$) and ICAM-1 ($p<0.001$) and significant increase in HDL-c ($p<0.05$) compare to beginning of study. At the end of study there were significant decrease in LDL-c/HDL-c ($p<0.05$), TC/HDL-c ($p<0.05$), IL-6 ($p<0.001$), ICAM-1 ($P<0.001$) and significant increase in HDL-c ($p<0.05$) compare to placebo group.We can conclude that 200 mg daily CoQ10 for 3 months may have favorite effects on serum lipoproteins and inflammation indicators but no effect on fibrinogen and may be benefical in myocardial infarction patients.