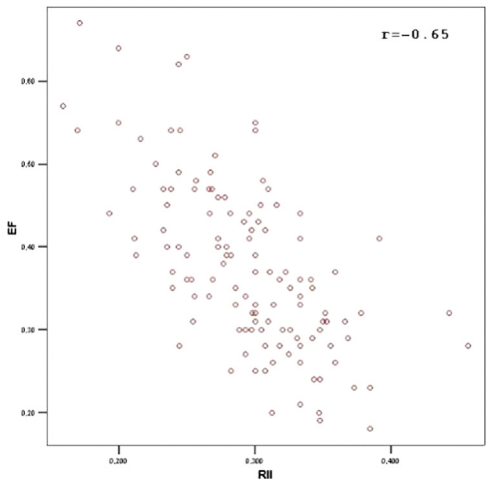

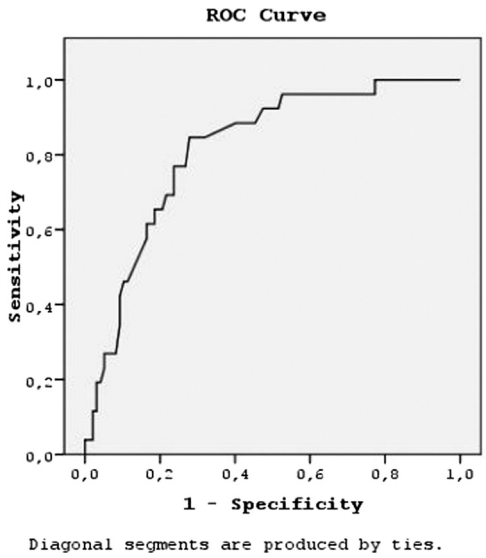

Table 1. Clinical and Laboratory Characteristics in Two RII Groups.

	RII < 0.30 (n=61)	RII ≥0.30 (n=62)	p
LVEF, %	42.8 ± 9.4	32.8 ± 8.6	<0.001
Age, years	62 ± 14	63 ± 15	NS
Sex, F/M	17/44	12/50	NS
Hypertension, n	26	23	NS
Dyslipidemia, n	16	19	NS
Diabetes mellitus, n	9	11	NS
72 h TnI, ng/ml	24 ± 16	42 ± 24	<0.001
Final TIMI flow 2-3,	55	57	NS
Door-to-balloon time, min	48 ± 10	50 ± 9	NS
Symptom-to-balloon time, hr*	4(3-6)	3.5(3-6)	NS
MCE			
Death, n (%)	4 (6.6)	8 (12.9)	NS
Stroke, n (%)	0 (0)	1 (1.6)	NS
Non fatal MI, n (%)	2 (3.3)	4 (6.5)	NS
New CHF, n (%)	2 (3.3)	8 (12.9)	NS
Composite MCE, n (%)	8 (13.1)	21 (33.9)	0.01

CHF, congestive heart failure; LVEF, left ventricle ejection fraction; MCE, major clinical events; RII, relative importance index; TnI, troponin I; TIMI, Thrombolysis in Myocardial Infarction; NS, non-significant Data are expressed as no. (%) or mean ± standard deviation. *Data are presented as median and interquartile ranges.

Epidemiology

Saturday, October 26, 2013, 14:00 PM–15:15 PM
Hall: BISHKEK

Abstract nos: 14-19

ORALS

OP-014

Evaluation of Cardiovascular Risk Factors Among University Students in Northern Turkey: A Cross-sectional Survey

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Background: Recent data indicate increasing rates of mortality from cardiovascular (CV) disease in Turkey. This study aimed to evaluate (CV) disease risk factors among university students in Northern Turkey.
Methods: In this cross sectional descriptive study, 302 students were randomly recruited (171 females (57%) and 131 males (43%), mean age of 20±2.1 years). Blood glucose, cholesterol profile (total, HDL, and LDL cholesterol), triglyceride, glycosylated haemoglobin, resting blood pressure, and BMI were measured using standard protocols. All participants were asked to complete a questionnaire including questions on lifestyle, genetic predisposition, smoking habit, and psychosocial factors.
Results: The mean systolic and diastolic blood pressures of students were 127.1 mm Hg±13.5 and 78.3±mm Hg 12.4.The mean values were 98.4±14.2 mg/dL for fasting blood glucose value, 5.4±0.4 for HbA1C, 80.0±10.3 for heart rate, for total cholesterol 199.1±24.6 mg/dL, 43.8±9.9 mg/dL for HDL, 114.7±24.1 mg/dL for LDL, 199.1±24.6 mg/dL for triglyceride, 24.8±3.6 kg/m2 for BMI, 97.6±17.9 for waist circumference. No significant difference was observed between gender according to cardiovascular risk factors' values statistically. It was observed that 111 (36.8%) students were overweight, 32 (10.6%) were obese. About 135 (% 44) of students had abnormally unacceptable WC value. Smoking habit was seen in 130 (43.0%) students [73 (24.2%) male; 57 (18.9%) female].
Conclusion: A substantial proportion of Turkish students were overweight or obese, and had smoking habit. Our results underscore the need to implement health promotion programmes and perform large-scale epidemiological studies within the general Turkish young adult population.

OP-015

Abnormal ECG Findings In Turkish Adults: An Epidemiologic Observational Study

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Aim: Atherosclerotic cardiovascular disease (CVD) is the leading cause of death worldwide. Abnormal electrocardiography (ECG) findings are predictors of short-term cardiovascular risk. We aimed to contribute lacking national epidemiologic data regarding the prevalence of abnormal ECG findings in Turkish adults.
Method: The prevalence of abnormal ECG findings and arrhythmias were investigated in the west Black sea region of Turkey. A total of 2239 subjects over 18 years old were examined with 12 derivation resting ECG in this large epidemiological observational cohort study. Pathological Q waves, axis deviation, high R amplitude, ST-T changes, atrioventricular (AV) blocks, intraventricular (IV) blocks, arrhythmias and low QRS voltage were interpretated as ECG parameters. ECG findings were classified according to the Minnesota coding system.
Results: Mean age was 50±15 (age= 18 to 92). Age-adjusted (over 40 years old) prevalence of abnormal ECG findings and arrhythmias were detailed in the following respectively; pathological Q waves 2.06%, left axis deviation 9.64%, high R wave amplitude 6.57%, ST segment depression 2.01%, T inversion 3.25%, left bundle branch block (LBBB) 2.63 %, extrasystoles 3.26% and atrial fibrillation 2.01% (Table 1).
Conclusion: Compared with the previous national epidemiological study, this observation reveals the increasing trend of the prevalence of arterial hypertension, coronary artery disease (CAD) and atrial fibrillation in the last two decades in Turkey.

Table 1. Prevalence of Abnormal ECG findings and Arrhythmias

Variables	18-39 years n=642	40-59 years n=949	60- years n=648	Total n=2239
Pathologic Q wave, n (%)	7 (1.09)	18 (1.89)	15 (2.31)	40 (1.78)
Left axis deviation, n (%)	17 (2.64)	68 (7.16)	86 (13.27)	171 (7.63)
Right axis deviation, n (%)	4 (0.62)	2 (0.21)	8 (1.23)	14 (0.62)
High R wave, n (%)	26 (4.05)	46 (4.84)	59 (9.10)	131 (5.85)
ST depression, n (%)	8 (1.24)	13 (1.37)	19 (2.93)	40 (1.78)
Negative T wave, n (%)	13 (2.02)	27 (2.84)	25 (3.85)	65 (2.90)
Arrhytmias, n (%)	31 (4.82)	38 (4.00)	69 (10.64)	138 (6.16)
Low QRS voltage, n (%)	20 (3.11)	37 (3.89)	12 (1.85)	69 (3.08)
AV blocks, n (%)	8 (1.24)	9 (0.94)	11 (1.69)	28 (1.25)
1?AV block, n (%)	3 (0.46)	7 (0.73)	7 (1.08)	17 (0.75)
WPW pattern, n (%)	2 (0.31)	-	-	2 (0.09)
Short PR, n (%)	3 (0.46)	2 (0.21)	3 (0.46)	8 (0.35)
2?Mobitz type-1, n (%)	-	-	1 (0.15)	1 (0.05)
IV blocks, n (%)	29 (4.51)	66 (6.95)	77 (11.88)	172 (7.68)
Left bundle branch block, n (%)	1 (0.15)	19 (2.00)	23 (3.54)	43 (1.92)
Right bundle branch block, n (%)	24 (3.74)	24 (2.53)	33 (5.10)	81 (3.62)
Left anterior hemiblock, n (%)	4 (0.62)	23 (2.42)	17 (2.62)	44 (1.96)
Non-spesific blocks, n (%)	-	-	4 (0.62)	4 (0.18)
Extrasystole, n (%)	7 (1.09)	19 (2.00)	33 (5.09)	59 (2.63)
Atrial fibrilation, n (%)	-	6 (0.63)	26 (4.01)	32 (1.42)
Paroxysmal SVT, n (%)	-	1 (0.10)	2 (0.31)	3 (0.13)
Sinus tachycardia, n (%)	23 (3.58)	9 (0.95)	3 (0.46)	35 (1.56)
Sinus bradycardia, n (%)	1 (0.15)	3 (0.32)	4 (0.62)	8 (0.35)
Long QT, n (%)	-	-	1 (0.15)	1 (0.05)
Pathologic Q wave, n (%)	7 (1.09)	18 (1.89)	15 (2.31)	33 (2.06)
Left axis deviation, n (%)	17 (2.64)	68 (7.16)	86 (13.27)	154 (9.64)
Right axis deviation, n (%)	4 (0.62)	2 (0.21)	8 (1.23)	10 (0.62)
High R wave, n (%)	26 (4.05)	46 (4.84)	59 (9.10)	105 (6.57)
ST depression, n (%)	8 (1.24)	13 (1.37)	19 (2.93)	32 (2.01)
Negative T waves, n (%)	13 (2.02)	27 (2.84)	25 (3.85)	52 (3.25)
Left anterior hemiblock	4 (0.62)	23 (2.42)	17 (2.62)	40 (2.50)

AV; Atrioventricular, IV; Intraventricular, SVT; Supraventricular tachycardia

OP-016

The Frequency of Dyslipidemia in Adults in Turkey

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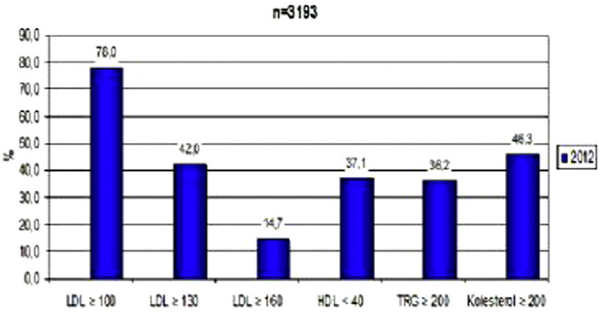
Objective: The aim of the study was to determine the frequency of hypercholesterolemia, hypertriglyceridemia and low HDL cholesterol levels in Turkish adults.
Method: This study is an analysis of the 3rd year follow up results of Prospective Urban Rural Epidemiological Study (PURE). PURE Turkey is being conducted in urban and rural areas of 8 provinces, which are Istanbul, Kocaeli, Samsun, Aydın, Gaziantep, Malatya, Antalya and Nevşehir since 2008. Blood samples were obtained from 3193 participants (F: 1979; M: 1214, ages between 38-73 years) in 3rd year of the study. Lipid levels were analyzed in serum samples after minimum 8 hours fasting with Cobas Integra 800 analyzer using enzymatic colorimetric method. LDL-cholesterol values were calculated according to Friedewald formula. Cut off values for each lipid parameters are as follows: total cholesterol ≥200 mg/dL, triglycerides ≥150 mg/dL, HDL-cholesterol <40 mg/dL. Three categories were defined for LDL-cholesterol as ≥100 mg/dL, ≥130 mg/dL and ≥160 mg/dL.
Results: The dyslipidemia rates were 46,3% for hypercholesterolemia, 36,2% for hypertriglyceridemia and 37,1% for low HDL-cholesterol. Seventy-eight percent of participants had LDL-cholesterol ≥100 mg/dL. The frequency of LDL-cholesterol levels ≥130 mg/dL and ≥160 mg/dL were 42% and 14,7% respectively.
Conclusion: Nearly half of the population aged between 38-73 years had hypercholesterolemia in Turkey. Obesity and metabolic syndrome, which were reported with very high prevalence in Turkish population may be the common cause of substantially high and similar rates of hypertriglyceridemia and low HDL-cholesterol levels since all are closely linked with insulin resistance.



OP-017

A Genetic Variant Associated with Lipoprotein(a) Level and Coronary Disease Risk in Turkish Adults

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Aim: Lipoprotein(a) [Lp(a)] level is an established risk factor for coronary heart disease (CHD) and has been implicated in carotid artery disease. The relationship between genetic variation in the LPA gene region and CHD risk remains unknown. In this study, therefore, we aimed to investigate the effects of the rs10455872 polymorphism in the LPA gene locus on Lp(a) levels and risk factors for CHD in the Turkish population.
Method: We examined one single-nucleotide polymorphism (SNP) in LPA gene in the Turkish Adult Risk Factor (TARF) Study DNA bank which has been established between 2004-2010 years. The sample was comprised of 2252 Turkish adults. Genotyping was performed by high throughput system, Real-Time PCR LC480 device. The association between biochemical, clinical parameters and the polymorphism have been analyzed using SPSS software. For continuous variables, ANOVA T-test was used, whereas X^2 analysis was performed for categoricals.
Results: The distribution of the LPA rs10455872 polymorphism in this adult population was 97% (n=2185), 3% (n=66) and 0% (n=1) for the AA, AG and GG genotypes, respectively. The G allele frequency was found to be 0.03. The rs10455872 in LPA gene locus was most strongly associated with higher Lp(a) levels ($p<0.0001$). In addition, the LPA rs10455872 AG genotype was correlated higher total cholesterol and LDL-C levels in Turkish adults ($p<0.05$).
Conclusion: The LPA rs10455872 AG genotype appears to be a risk factor against CHD by increasing the Lp(a), total cholesterol and LDL-C levels.

OP-018

The Prevalence and Clinical Characteristics of Mitral Valve Prolapse in a Large Population-Based Epidemiologic Study

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Background: Mitral valve prolapse (MVP) is the most common cardiac valvular abnormality in industrialized countries. Its prevalence has been estimated around 2.4%, ranging from 2% to 4%. The purpose of this study was to determine the prevalence, demographic, clinical and echocardiographic characteristics of MVP in a large population-based epidemiologic study.
Methods: A total of 2298 subjects with a mean age of 50 (age range 18–92) living in Melen valley, which is inhabitant of 21 000 people were interviewed. An echocardiography machine utilizing 2-5 MHz probe specific for field studies (M Turbo, SonoSite Inc., Bothell, WA, USA) was used. The displacement of each leaflet was measured in the parasternal long-axis view above a line connecting the mid portions of the annular hinge points. The thickness of the mitral valve was measured by M mode recording. Each leaflet was measured, and maximal thickness was used for categorization. The degree of mitral regurgitation was assessed by the method recommend by current guideline. Thyroid ultrasonography: It was performed and interpreted by the same experienced physician, using the same equipment with a 5–12-MHz linear-array transducer (M Turbo, SonoSite Inc., Bothell, WA, USA). Size of the thyroid lobes and characteristics of thyroid parenchyma and nodules were determined. Goiter prevalence was defined according to Gutekunst's criteria. Gutekunst reference values for adults (>18 cm3 in women and >25 cm3 in men) were used. Hyper and hypothyroidism: A thyroid stimulating hormone (TSH) level of <0.35 μIU/mL was accepted as hyperthyroidism and >4.5 μIU/mL as hypothyroidism. Major depression: The questionnaire included an extensive list of questions that operationalize DSM-IV criteria for major depression. The participants who refused echocardiography measurement and had poor image quality and blood sampling were excluded