

Results: Our data indicated that body mass index (BMI) (28.1 ± 5.4), low-density lipoprotein (LDL-c) (126.1 ± 42.5), diabetes (13), and hypertension (39) in CAD patients were significantly higher than in the control subjects (26.2 ± 3.9 ; 106.1 ± 26.3 ; 2; and 18, respectively) ($p < 0.05$). No significant differences were observed in the frequencies of c.454–351A>G and c.454–397T>C genotypes of the ESR1 gene in CAD patients compared to healthy individuals ($p < 0.05$).

Conclusions: The ESR1 gene c.454–351A>G and c.454–397T>C polymorphisms did not represent an important risk factor for this disease in a Turkish population.

OP-026

THE INVESTIGATION OF THE MTHFR GENE POLYMORPHISMS IN CORONARY ARTERY DISEASE IN THE TURKISH POPULATION

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Objective: Many different genetic and clinical factors have been identified as causes or contributors to atherosclerosis. Coronary artery disease (CAD) is usually caused by individual's susceptibility to various genes, environmental factors, and the interaction between them. The 5,10-methylenetetrahydrofolate reductase (MTHFR) enzyme catalyse the methylation of homocysteine (Hcy) to methionine. The aim of this study was to investigate the association between MTHFR c.665C>T and c.1286A>C polymorphisms and CAD, and whether specific polymorphisms in the MTHFR gene are associated with CAD in the southeastern Turkish population.

Methods: Eighty patients with CAD and 100 healthy individuals were enrolled to study, and their DNA were isolated. A polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP) technique was used to determine the frequencies of MTHFR gene: c.665C>T (HinfI>C) and c.1286A>C (MboII)>C polymorphisms in CAD cases.

Results: Our data indicated that body mass index (BMI) (28.1 ± 5.4), low-density lipoprotein (LDL-c) (126.1 ± 42.5), and frequencies of diabetes (13.0) and hypertension (39.0) were significantly higher in CAD patients than the control subjects (26.2 ± 3.9 ; 106.1 ± 26.3 ; 2.0; and 15.0, respectively) ($p < 0.05$). No significant differences were observed in the frequencies of c.665C>T and c.1286A>C genotypes of the MTHFR gene in CAD patients compared to healthy individuals ($p < 0.05$).

Conclusions: The MTHFR gene c.665C>T and c.1286A>C polymorphisms did not represent an important risk factor for this disease in the southeastern Turkish population.

OP-027

THE RELATIONSHIP BETWEEN SERUM GLUCOSE, INSULIN LEVEL, INSULIN RESISTANCE AND ELECTROCARDIOGRAPHIC PARAMETERS

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Objective: Diabetes mellitus (DM), impaired fasting glucose and hyperinsulinemia-Insulin resistance (IR) are well known risk factor for coronary heart disease. However, the relationship between diabetes mellitus, impaired fasting glucose, hiperinsulinemi and electrocardiographic (ECG) parameters (heart rate, QRS width, and repolarization parameters, such as QT, QTc and JTc) has not been studied exactly yet. In this study, we aimed to investigate the relationship between diabetes mellitus, impaired fasting glucose, hiperinsulinemi and electrocardiographic repolarization parameters in Turkish population.

Methods: The study population consisted of 204 of consecutive patients. Electrocardiographic recordings were obtained from all

of the study population as in the rest situation (minimum 20 minutes). In ECG recordings, heart rate, QRS width, QT interval, corrected QT (QTc) and JT (JTc) according to Bazett's formula were measured. After at least an eight-hour fasting period, serum glucose and insulin levels measured from all patients. Insulin resistance (HOMA-IR) score was calculated by dividing the product of fasting plasma insulin (microunits per milliliter) and fasting plasma glucose (milligrams per deciliter) by 405.

Results: The mean age of the study population was 46.8 ± 13.6 years and 53.4% was men. Of these 204 patients, 12% had fasting blood glucose >126 mg/dl (DM group), 26.5% had fasting blood glucose between 100 – 126 mg/d (IFG) and 60.8% had fasting blood glucose <100 mg/dl (control group). The analysis carried out between three groups revealed that there were significant differences in terms of dQT and heart rate. Correlation analysis revealed that there was significant correlation only between insulin level, HOMA and QRS duration (for insulin-QRS duration: 0.26 , $p = 0.01$, for HOMA-QRS duration $r = 0.25$, $p = 0.02$).

Conclusions: The spectrum from control group up to diabetes mellitus revealed that QRS and QT was not changed but heart rate and dQT increased. In addition, increased insulin level and insulin resistance were only significantly related to QRS duration, likely due to myocardial hypertrophy.

Table 1. Differences in terms of dQT and heart rate diabetes mellitus, impaired fasting glucose and control group.

	Control	IFG	DM	P value
Heart rate (/mn)	73.6 ± 12.6	79 ± 14.1	84.2 ± 14.3	$0.02^* 0.01^{**}$
QRS (msn)	97.6 ± 10.8	99.4 ± 13	97.2 ± 9.4	NS
QT (msn)	381 ± 34	374 ± 30	383 ± 47	NS
dQT (msn)	412 ± 21	418 ± 17	433 ± 14	$0.0001^{**} 0.004^{***}$

The analysis carried out between three groups revealed that there were significant differences in terms of dQT and heart rate. (*p value for control vs IFG ** p value for control vs DM *** p value for IFG vs DM), NS; Not significance.

OP-028

PLEURAL FLUID TRIGLYCERIDE CHOLESTEROL RATIO IN POST-CARDIAC SURGERY CHYLOTHORAX

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Objective: Very little if any is discussed in the recent cardiothoracic surgery publications about the value of triglyceride cholesterol ratio either in the diagnosis or the prognosis of postcardiac surgery chylothorax.

Methods: A retrospective analysis of 60 patients of chylothorax with a mean age of 23 months (range, 1 month-60 years) who developed chylothorax after heart surgery between January 2007 through December 2010. Data were collected regarding demographics, method of diagnosis, surgical procedures, characteristics of chylous drainage and its management. The patients were divided according to the TG/Cholesterol ratio into 3 groups; Group 1 (ratio <1). Group 2 (ratio 1 – 2) and Group 3 (ratio >2).

Results: Eighteen cases had a ratio <1 , 14 had a ratio between 1 – 2 and 28 had a ratio >2 . There were 2 hospital mortalities; Both had a triglyceride/cholesterol ratio >2 . All patients responded to the conservative treatment except 3 cases of the group 3 and 2 of them required thoracic duct ligations.

Conclusions: Pleural Fluid Triglyceride Cholesterol Ratio in Chylothorax can be used in the diagnosis of chylothorax and more importantly as a prognostic detector in cases of post cardiac surgery chylothorax.