Dyslipidemia and its relation with smoking in Tehran

Abstract

**Background & Objective:** Dyslipidemia and smoking are among the most important medical problems in human society. Their share in the mortality of coronary heart disease (CHD) has led to multiple investigations about them. This study was done to determine the prevalence of dyslipidemia and the effect of cigarette usage on it.

**Materials & Methods:** This epidemiological cross-sectional study was carried out on 9632 persons selected randomly in Tehran urban with a minimum age of 20 years and over. We measured fasting blood sugar, blood sugar 2 hours after 75 grams oral glucose, triglyceride, total cholesterol, LDL cholesterol, HDL cholesterol. Degree of physical activity was registered according to Lipid Research Clinics classification. Anthropometrics data, social condition, family history and smoking exactly delineated. Our patients were divided into: those having normal lipid profile and primary dyslipidemia (without any risk factor for dyslipidemia) and secondary dyslipidemia (having one or more risk factors such as diabetes mellitus). ANOVA, t.test, and logistic were used to analyze the level of significance.

**Results:** Our population sample consisted of 5619 female and 4013 male. 68.5% of our cases had dyslipidemia. 65.8% of females and 72.3% of males had at least one type of dyslipidemia. There were 1085 smokers (11.4%) that 73.2% of them were dyslipidemic. With comparing smokers to nonsmokers shows that in smokers HDL cholesterol, LDL cholesterol and total cholesterol had decreased and triglyceride increased (p<0.05).

**Conclusion:** Tehran population suffers from dyslipidemia. Large number of secondary dyslipidemia and smoking highlighted the importance of education to overcome to these preventable and modifiable factors.

**Key Words:** Primary dyslipidemia- Secondary dyslipidemia- Smoking