

2nd International Conference and Exhibition on **Physical Medicine & Rehabilitation**

July 14-16, 2014 DoubleTree by Hilton Baltimore-BWI Airport, USA

Myocardial infarction under 55 years and cholesterol/high density lipoprotein ratio in a multiple risk factor model

Zinat Nadia Hatmi

Tehran University of Medical Sciences, Iran

Aims: To find more features of the relation between cholesterol/high density lipoprotein ratio and its five subgroups with myocardial infarction under 55 years and above it.

Methods: A hospital based case control study with incident cases was designed. Cases were comprised of 523 under 55 years incident myocardial infarction patients.

Controls: Including 699 documented newly diagnosed myocardial infarction above 55 years.

Statistical analysis: Independent sample t-test, Pearson chi square test, Odds ratios and Mantel Hanszel test were done. Logistic regression analysis was conducted to evaluate multivariate adjusted relationships.

Results: Patients with very low risk category of cholesterol/high density lipoprotein ratio estimated Odds Ratio=0.18 with 95% confidence interval (0.04-0.72) for developing myocardial infarction under 55 years. Patients who had low risk category of cholesterol/ high density lipoprotein ratio having Odds Ratio=0.26 95% (0.07-0.89). Low risk and very low risk categories of the cholesterol/high density lipoprotein ratio compared to high risk subgroup of the ratio attenuate the risk of developing myocardial infarction under 55 years $p < 0.05$.

Conclusions: Our study results can be translated as mitigation of cholesterol concentration and rising of high density lipoprotein in both general population and victims of coronary events. Mitigation of the level of cholesterol/high density lipoprotein ratio from low risk to very low risk category will attenuate the risk of myocardial infarction under 55 years 8%. Aggressive treatment for lowering this ratio could be immediate clinical implication of our findings.

hatmizn@sina.tums.ac.ir