A competitive study about serum vit D level in patients with acute MI and control group

Abstract

Introduction

Cross-sectional studies have shown the association between vitamin D deficiencies and cardiovascular risk factors. There is not entirely harmonious in performed studies to prove the association of vitamin D deficiency with cardiovascular outcome, hence there is the need for further studies in various communities in this field. As regard to the high prevalence of vitamin D deficiency in this province, we intended to evaluate the relationship between the levels of this vitamin among patients with myocardial infarction.

Material and Methods

This is a case-control study and carried out on 150 persons (75 patients with acute myocardial infarction and 75 persons without any history of myocardial infarction in clinical and paraclinical evaluations). In this study were asked questions from patients relation to demographics information, cardiovascular risk factor, occupation, education, place of residence and etc, then obtained results were formed as a check list. Then blood samples to measure levels of serum vitamin D were taken and sent to the laboratory. Obtained data association with lab results were analyzed by SPSS v16 software and were discussed these results.

Results

In this study in case group 55 persons (73.3%) were women and in control group 50 persons (66.7%) were men, as well as the average age in cases was 60.78±11.41 years and also in controls 58.68±9.52 years. In cases 38.66% persons were with diabetes, 54.66% with smoking history, 57.33% with hypertension, and 22.66% with cardiac ischemia history; whereas in controls 18.66% with diabetes, 40% with smoking history and 36% were with hypertension history. In this study was observed no significant relationship between the mean of vitamin D levels in two groups, as well as the levels of this vitamin is not associated with age, gender, infarct pattern, smoking, diabetes and hypertension.

Conclusion

In total evaluation in this study was observed that there is no significant relationship between vitamin D level and incidence of cardiovascular disease and also risk factors of cardiovascular disease.

Key Words: Vitamin D, Acute myocardial infarction