

Postprandial triglyceride levels in type 2 diabetic patients with and without history of myocardial infarction

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ABSTRACT

Introduction: Cardiovascular disease is a major cause of death in diabetic cases. Studies have shown that hypertriglyceridemia is an important risk factor for cardiovascular disorders. Although triglyceride level is generally increased in postprandial periods, the association between postprandial triglyceride level in diabetic patients and cardiovascular diseases and myocardial infarction (MI) has not yet been investigated. This study was aimed to determine triglyceride level of type 2 diabetic patients with and without history of MI, before and after meal.

Methods: This clinical trial study consisted of 2 groups of diabetic patients. The first group included 44 diabetic patients without history of MI. The second ones were 44 diabetic patients that at least 6 months had elapsed since they had MI. Two samples were collected from all patients: 12 hours after fasting and 2 hours after an ordinary breakfast (including 315 Kcal). Weight, systolic and diastolic blood pressures of both hands, waist and hip circumferences, and age were also recorded in the questionnaire. Data were analyzed by t-test.

Results: mean age of patients was 56.73 ± 10.26 years. Mean weight was 71.67 ± 11.98 kilograms. There was a statistically significant difference between postprandial (236.73 ± 87.52 mg/dl) and fasting (220.68 ± 91.58 mg/dl) triglyceride levels in diabetic patients with previous MI ($P=0.001$), while there was no significant difference in diabetic patients without previous MI.

Conclusion: This survey revealed that postprandial triglyceride levels in diabetic patients with previous MI is higher than that in patients without history of MI. Postprandial hypertriglyceridemia may be an important factor in atherosclerosis process, hence further investigations is suggested in this concern.

Key words: Triglycerides – Diabetes Mellitus, Type 2 – Myocardial Infarction

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