

Decrease of serum magnesium in type 2 diabetic patients

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Abstract

Background and Objective: Some studies show that, there is a relationship between decrease of serum magnesium (Mg) level and the insulin resistance in diabetic type 2 patients. The aim of this study was to compare the Mg level in type 2 diabetic with non-diabetic individuals.

Material and Methods: Diabetic patients (n=35) and control group (n=35) were randomly selected from over -35- year-old individuals referring to the hospital of Imam Ali, Andimeshk.

Results: Mg levels in diabetic and non- diabetic groups are 1.33 ± 0.27 and 1.62 ± 0.21 mg/dl, respectively, and the difference is statistically significant ($p < 0.001$). A reversed significant relationship is seen between FPG and Mg among type 2 diabetic patients, whereas no significant relationship is seen between Mg and other variables, (TG, Chol and HDL). In non-diabetics group, there is a reversed significant relationship between the Mg and Chol, While no relationship between other variables and magnesium.

Conclusion: In diabetic patients, with increased level of FPG, serum Mg levels are decreased significantly. Moreover, serum Mg levels in diabetic patients are significantly lower than non-diabetics.

Keywords: Magnesium, Diabetes type 2, Cholesterol, Triglyceride, HDL.