Abstract

Objective: The aim of our study was to examine the changes in hypertransaminasemia after weight reduction in obese patients with and without NAFLD and the relation with insulin resistance. Research Methods: A population of 162 obese patients was randomly allocated to two groups: a) diet I (low fat) and b) diet II (low carbohydrate), dieting along 3 months. Patients were classified as group I (n=112) when serum ALT activity was normal or group II (NAFLD, n=30) when serum ALT activity was (>=43 UI/L). Results: In control group with diet I, BMI, weight, fat mass, waist to hip ratio, waist circumference, systolic pressure, total cholesterol, LDL cholesterol, HOMA and insulin levels decreased. In NAFLD group with diet I improved the same parameters and glucose, triglycerides, ALT, AST, gamaglutamine transferase levels, too. In control group with diet II, BMI, weight, fat mass, waist to hip ratio, waist circumference, systolic pressure, total cholesterol, LDL cholesterol, HOMA and insulin levels decreased. In NAFLD group with diet II improved the same parameters and glucose, triglycerides, ALT and gamaglutamine transferase levels, without statistical changes in AST. Conclusion: We showed that weight reduction secondary to two hypocaloric diets was associated with improvement in hypertransaminasemia and insulin resistance in NAFLD patients.

Keywords

Insulin resistance, Low carbohydrate hypocaloric diet, Low fat hypocaloric diet, Nonalcoholic fatty liver disease, Obesity.