TO STUDY THE INDICATORS OF LEPTIN AND ADIPONECTIN IN PEOPLE WITH NAFLD.

Shagazatova B.H. Rakhimova S.X.
Tashkent Medical Academy

Relevance. Non-alcoholic fatty liver disease (NAFLD) is the most common chronic liver disease in which liver biopsy remains the gold standard for diagnosis. We suggested that the adiponectin-leptin ratio (AL coefficient) may be a good marker for early detection of lean NAFLD regardless of insulin resistance.

Materials and methods. The study included 44 patients with NAFLD and morbid obesity, the control group consisted of 30 patients without fatty liver disease. Serum levels of adiponectin and leptin were measured using enzyme immunoassay. Multivariate logistic regression analysis was performed to assess the odds ratio of NAFLD in relation to serum AL concentration terciles after adjustment. Receiver performance analysis (ROC) was used to evaluate the diagnostic effectiveness of the AL coefficient for NAFLD.

Results. The average age of the participants was 42.8 ± 11.5 years. Compared with the control group, the probability of NAFLD for the highest and lowest AL ratio was 0.28 (95% CI: 0.12-0.69) after adjustment. When comparing the ratio of AL, BMI, triglycerides, AST/ALT ratio to the diagnostic parameters of NAFLD, ROC was 0.85 (95% CI: 0,82–0,88), 0,83 (95% DI 0.78–0.87) and 0.86 (95% CI 0.81–0.88). 0.91) for all NAFLD, NAFLD in women and NAFLD in men, respectively. ($p < 0.001$). The adiponectin-leptin ratio was associated with the severity of steatosis and was a better predictor of NAFLD obesity than each individual adipokine.

Conclusions: The study showed that the AL ratio can be a good biomarker for early differentiation of patients with NAFLD from patients from the control group, regardless of insulin resistance. It was revealed that the adiponectin-leptin ratio is the only independent marker acting as a predictor of lean NAFLD.