# Adipokines and lipid profile changes in nonalcoholic fatty liver diseases patients

Zakharenkova A.V.

Student of Kharkiv National Medical University, first medical faculty, 6th year, 14th group,

Lapshyna K.A. Bashkirova A. D.
Postgraduate Students, Department of Internal Medicine № 1; Kharkiv National Medical University, 4, Nauky ave., Kharkov, Ukraine, 61022

The supervisor of studies: d.med. Mr., prof. O.Ya. Babak

Abnormal secretion of adipokines may play a key role in the development of metabolic syndrome, including non-alcoholic fatty liver disease (NAFLD) and progression of nonalcoholic steatohepatitis (NASH). Excessive visceral adipose tissue was identified as one of the main causes leading to the development of NAFLD

The purpose of the study was to analyze the levels of fibroblast growth factor-21 (FGF21) and lipid profile changes in the blood of patients with NASH.

Materials and methods: 90 NAFLD patients at the stage of NASH 20 healthy controls were examined. Among the examined were 67 men and 53 women aged 30 to 60 years. An assessment of clinical and biochemical data was carried out. The level of FGF21 was determined in plasma by ELISA kit.

Results: FGF21 levels in patients in the studied groups had a significant difference - the average values ​​in the first group were 343.74 (274.4; 413.94) pg / ml - median, 25th and 75th quartiles respectively; in the median-A control group was 101.96 (91.87; 117.5) pg / ml, (˂ 0.001). The average lipid profile in the first group was: total cholesterol - (5.8 ± 0.32) mmol / l, triglycerides - (1.89 ± 0.85) mmol / L, LDL cholesterol - (0.7 ± 0, 16) mmol / L, HDL - (0.72 ± 0.3) nmol / L, LDL - (3.71 ± 0.7) mmol / L, CA - (3.46 ± 1.2); in the control group: total cholesterol (4.25 ± 0.6) mmol / L, triglycerides - (0.89 ± 0.09) mmol / L, LDL cholesterol - (0.48 ± 0.07) mmol / HDL - (1.4 ± 0.08) mmol / L, LDL - (2.27 ± 0.16) mmol / L, CA - (1.96 ± 0.1) (p ˂ 0.05).

Conclusions: The analysis of plasma FGF21 levels showed significant differences between the groups of patients with NASH and the control group. The lipid profile and FGF21 levels significantly exceeded the control group's results.

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