THE INFLUENCE OF RESISTIN ON LIVER FUNCTION IN PATIENTS WITH DIABETES MELLITUS TYPE 2 AND OBESITY

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Resistin is an adipokine that can cause the proinflammatory effects in star-like liver cells, which are the key modulators of fibrosis. There is a need in further study of resistin effects on liver function and its role in the pathogenesis of nonalcoholic fatty liver disease (NAFLD) against the background of metabolic disorders.

Purpose. To assess the relationship between resistin and indexes of enzyme and pigment metabolism in patients with NAFLD combined with diabetes mellitus (DM) type 2 and obesity.

Materials and Methods. 50 patients with NAFLD in combination with DM type 2 and obesity (body mass index $\geq$ 30 kg/m^2) were examined. The control group included 20 healthy individuals. Indexes of enzyme and pigment metabolism were defined by biochemical methods (a set of reagents «Dac spectroMed»). The level of resistin was determined by immunoassay method (a set of reagents «BioVendor»).

Results. The mean level of resistin in patients was significantly increased (10,0 ± 0,11 ng/ml, $p < 0,001$) in comparison with the control group (4,87 ± 0,11 ng/ml). The direct correlation was established between resistin and the following indexes: aspartate aminotransferase ($r = 0,57$; $p < 0.05$), alanine aminotransferase ($r = 0,49$; $p < 0.05$), total bilirubin ($r = 0,59$; $p < 0.05$), conjugated bilirubin ($r = 0,71$; $p < 0.05$), alkaline phosphatase ($r = 0,82$; $p < 0.05$).

Conclusion. The increase of resistin level can negatively affect the pathogenesis of NAFLD, amplifying the processes of cytolysis, cholestasis and fibrogenesis in patients with comorbid DM type 2 and obesity.