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# SCIENCE, INNOVATIONS AND EDUCATION: PROBLEMS AND PROSPECTS



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# SCIENCE, INNOVATIONS AND EDUCATION: PROBLEMS AND PROSPECTS

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# MODERN APPROACHES TO THE MANAGEMENT OF PATIENTS WITH NON-ALCOHOLIC STEATOGEPATITIS AGAINST OBESITY

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**Introductions**. The urgency of optimizing the treatment of patients with non-alcoholic steatohepatitis (NASH) in people with metabolic syndrome (MS), the components of which are obesity, diabetes mellitus (DM) type 2, is determined by a significant recent increase in MS, high disability and mortality due to development a wide range of complications, which are often fatal.

Aim: to determine the probable effect of a complex of steatel and metformin on the course of NASH and obesity, including state of the blood lipid spectrum, the degree of insulin resistance.

Materials and methods. 60 patients with NASH with first-degree obesity were examined. To determine the effectiveness of treatment, 2 groups of patients were formed. Control group (K) (30 people) received a low-calorie diet, metformin 500 mg 2 times a day, essential H as a hepatoprotective and hypolipidemic drug (1 capsule 3 times a day) for 90 days. The main group (O) (30 people) received a low-calorie diet, metformin 500 mg 2 times a day, steatel (enterally 10 ml 2 times a day) for 90 days.

**Results and discussion**. After 4 weeks of treatment, there was a decrease in total bilirubin in the blood of patients of group O on average 1.8 times against 1.2 (p <0.05) - in patients of group K with a probable intergroup difference (p <0, 05). The content of conjugated bilirubin in patients of group O decreased by 2.9 times against 1.4 times in group K (p <0.05), which indicates the strong membrane-protective

properties of steatel and its ability to eliminate the syndrome of cytolysis of hepatocytes and cholestatic component of NASH. Another confirmation of the possibility of eliminating the manifestations of cytolytic syndrome in patients with NASH within a month is a probable decrease in the activity of ACT in the blood of patients in group O by 2.0 times (p < 0.05) versus 1.4 times (p> 0.05) in patients of group K; as well as a decrease in ALT activity by 1.6 times (p <0.05) against an incredible tendency to decrease (p> 0.05) in group K, with a probable intergroup difference (p <0.05). The use of steatel also had a powerful anti-inflammatory effect. More significant positive dynamics was also observed in patients of group O regarding the correction of blood glycemic profile and IR indicators. In patients of group K on the 7th day of treatment the level of fasting blood glucose decreased by 13.7% (p <0.05), while in patients of group O blood glucose levels returned to normal. On the 15th day of treatment, supracardial glycemia in patients of group K decreased by 25.9%, in patients of group O - by 36.5% (p <0.05). Glucose content in 2 h after glucose loading in patients of group K on the 15th day of treatment decreased by 7.3%, O group - by 20.9% (p < 0,05). After treatment, the level of basal and postprandial glycemia in patients of all groups returned to normal. The content of glycosylated hemoglobin (HbA1c) in the blood on the 15th day of treatment probably decreased only in the O comparison group (by 24.7% (p < 0.05)), and in the K group the indicator only tended to decrease (p> 0). , 05). Fasting insulin levels after treatment probably decreased in all observation groups, but the actual normalization of the indicator was registered after treatment only in patients of group O. Proof of this statement is evidenced by the dynamics of changes in the index IR - HOMA IR, which in patients with NASH O group normalized on the 90th day of treatment (p <0.05), and in patients of group K - although decreased by 29.1% (p <0.05), but did not reach the norm.

Thus, a 90-day course of treatment with steatel in combination with metformin proved the ability to achieve stable normalization of carbohydrate metabolism, as it contributes to the rapid compensation of carbohydrate metabolism with impaired carbohydrate tolerance, elimination of IR syndrome.

**Conclusions**. Complex therapy with the use of steatel and metformin is effective in the treatment of nonalcoholic steatohepatitis on the background of metabolic syndrome for the correction of major clinical and biochemical syndromes of underlying and concomitant diseases, elimination of hyper- and dyslipidemia, reduction of atherogenic index, potentiates and insulin resistance indices.