



## An Unexpected Effect of Enzyme Therapy in Long-Existing Chronic Pancreatitis and Postoperative Intervention

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Against the background of inconsistency in the action of physiologically active compounds (PAS), and necrosis of the acini. In 80% of patients with CP, exocrine pancreatic insufficiency develops after surgery. Materials and methods. 47 patients with surgical interventions were examined, including: with pancreato-duodenal resection and 68 in patients with CP; three variants of pancreatic insufficiency were identified, based on the assessment of statistically significant increases in 5-HT, Ax, CCK, glucose uptake by erythrocytes, decrease in secretin and elastase. Results and discussion. In these patients, enzyme replacement therapy is a vital component of treatment. Important in the regulatory mechanisms of the intestinal brain is the release of enzymes in the upper part of the small intestine, which is the center for the regulation of motility, the release of FAS and the link between the central nervous system and the "gut" brain.

Regulation of the complex of ascending noradrenergic, dopaminergic, serotonergic, and cholinergic systems does not exclude the importance of the functioning of individual systems. Currently, there is little evidence describing the interaction between several neuromodulatory systems, but nevertheless, by conducting studies to determine the concentration of 5-HT and Ax, we identified an unusual reaction of neurotransmitters to the entry of enzymes into the upper part of the duodenum. The use of enzyme therapy at a dose of 25,000 units 3 times/day causes a statistically significant decrease in the concentration of Ax in the blood before food stimulation and Ax from  $1.7 \pm 0.3$  mmol/ml ( $p < 0.05$ ) to  $1.5 \pm 0.3$ , and a "return" to the main role of Ax in the activation of the secretory activity of the pancreas to food stimulation. On the other hand, the

concentration of 5-HT remains high at  $0.39 \pm 0.06$  µg/ml (control  $0.19 \pm 0.02$ ). Conclusion. Regulatory relationships are restored after food stimulation.

We believe that the presence of enzymes in the duodenum stops the physiologically harmful significant release. Ah, which does not affect the secretory activity of the pancreas in response to food stimulation. However, a high concentration of 5-HT in the blood remains, which can cause pain.