Application of the resonance scale of enzyme systems

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Regulatory oligopeptides are high molecular weight compounds composed of amino acid residues linked by peptide bonds. As a result of the cleavage of proteins in the gastrointestinal tract, oligopeptides are formed, including 2–3 amino acid residues, the hydrolysis of which is carried out exopeptidases to amino acids. Further, the process of membrane digestion begins, during which the final stage of the cleavage of the remaining oligopeptides and the transport of amino acids occurs. Absorption of protein hydrolysis products occurs through simple diffusion, active and facilitated transport.

Peptides are subdivided into: peptides, tripeptides; low molecular weight and high molecular weight oligopeptides; polypeptides.

It is assumed that the main directed action of regulatory oligopeptides is cell division and differentiation. They create an optimal rate of cell division, increase and optimize cell apoptosis by increasing the activity of intracellular systems. Oligopeptides also regulate the catalytic functions of enzymes in the body, the loss of which creates a metabolic block of the corresponding biochemical reactions. Pathological manifestations of the block can be associated with the accumulation of substances or with a deficiency of reaction products, which are usually synthesized as a result of the action of the enzyme. There is a large group of fermentopathies, called storage diseases, in which substances - the precursors of the reaction are deposited in cells (for example, glycogen in glycogenosis, glycoproteins, glycolipids in a number of lysosomal diseases,

Many pathological conditions are caused by a deficiency of the end products of the reaction, stopped as a result of fermentopathies, leading to a decrease in the biosynthesis of hormones (congenital dysfunction of the adrenal cortex, hypothyroidism, hypoparathyroidism, etc.).

Compounds that accumulate before the metabolic block often become toxic as a result of their transformation in bypass biochemical reactions.

Fermentopathies of urea synthesis lead to the accumulation of ammonia in the blood and tissues, which is accompanied by toxic damage to c.s.s. Fermentopathies can be associated with pathological changes in cell receptors. Thus, hereditary insufficiency of membrane receptors for low-density lipoproteins leads to impaired regulation of the activity of enzymes of cholesterol synthesis and hypercholesterolemia. Some fermentopathies are manifested by impaired active membrane transport. Acquired

fermentopathies can be a consequence of the toxic effects of xenobiotics and mutagens of the external environment, they are responsible for the various manifestations of the so-called human ecopathology. Heavy metals (lead, mercury, etc.), which are widespread in the environment, have a toxic effect on many enzymes. Fermentopathies can be caused by vitamin deficiency, because vitamins serve as cofactors for many enzymes. At the same time, the low activity of enzymes is determined by both a deficiency of vitamins and a violation of their binding by an apoenzyme with a protein molecule of the enzyme. The cause of fermentopathy may be a deficiency of biomicroelements.

Therapy for impaired functions is based on the use of enzyme preparations, the choice of which should be carried out taking into account the type, severity, reversibility of pathological changes.

Usually enzyme preparations are multicomponent medicines based on a complex of enzymes of animal, plant or fungal origin.

Oligopeptides developed by the firm "nnpcto" St. Petersburg contain peptide bioregulators, tropic to certain tissues (vascular, nervous, respiratory, gastrointestinal tract, immune, etc.), enriched with vitamins, essential oils, antioxidants and phytotherapeutic complexes. Oligopeptides are physiological correctors of body function, they are recommended both for the prevention of various diseases and for

braking processes aging. Way introduction oligopeptides transdermal.

The firm "IMEDIS" produced an electronic copy of the scale oligopeptides (1 to 20). We have investigated the possibility of using this scale in both diagnostic and therapeutic practice.

The first diagnostic step was the detection of enzyme deficiency according to the ENZYPHARM enzyme scale (materials of the 17th conference) with a falling arrow ( $\downarrow$ ).

Further testing of preparations of the resonance scale of enzyme systems (RSHFS) (from 1 to 20), which give an upward arrow. The RCFS scale, based on oligopeptide preparations, makes it possible to determine the blockage of fermentopathies in specific organs. Against the background of testing, there are 2-3 blocked oligopeptides out of 20. In this case, the main condition should be a combination of enzymes.

For example:

Enzyme from ENZYPHARM ↓ + OligPept ↑ + organopreparation ↓

The found organic drug was a key problem in the body associated with enzyme blockages.

Taking into account the test result, we select a drainage preparation corresponding to this system or conduct bioresonance therapy.

## conclusions

The found sum of oligopeptides from the RCFS scale in its composition corresponds to a certain system of facets in the body.

Using the RCFS oligopeptide scale, it is possible to reach the core of the problem with the shortest diagnostic step.

Further conclusions about the compensation of these disorders by oligopeptide complexes can be made according to the known connective tissue scales, biological indices (general and particular), and photon indices. Our observation shows their influence on the level of organ damage, but not compensates for the patient's psychological problems.

Thus, the use of oligopeptides makes it possible to effectively use it as a diagnostic scale for fermentopathies and their correction, as an additional source of amino acids, as well as to increase the immune and antihypoxic effect, reduce sensitivity to toxins and other damaging factors; normalization of metabolism in tissues, and increasing the efficiency of the processes of assimilation of nutrients by tissues and excretion of metabolic products. Oligopeptides have a positive effect on the activity of organs and tissues under normal and pathological conditions, maintaining the number of mature, functionally active cells at the physiological level, and

also the metabolism in them; about optimize the processes of organ recovery and fabrics.

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