



CLINICAL PHARMACOLOGY OF DRUGS THAT ACTIVATE AND CORRECT METABOLISM

Rasulov Boburjon Abdukakhhorovich

Assistant of the Department of "Pharmacology,
clinical pharmacology and medical biotechnology". ASMI

Article history:	Abstract:
Received: June 20 th 2024 Accepted: July 14 th 2024	Among the main factors causing metabolic disorders in the body, we can highlight insufficient physical activity, unbalanced nutrition, hormonal predisposition. Various acute and chronic diseases also affect human metabolism. Metabolics are drugs that correct metabolism and vital energy in the body, help speed up metabolism.
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INTRODUCTION

Types of disturbances in the digestibility and processing of elements occur in the main categories:

- protein metabolism;
- carbohydrate;
- fat metabolism;
- vitamins and minerals;
- water-mineral;
- acid-base;
- hormonal balance.

Proper metabolism and comprehensive weight loss are provided by various fat-burning, tonic, and immunostimulating agents. The drugs prescribed by the doctor to improve metabolism will differ in each of these cases. They are designed to regulate the metabolic processes occurring in the body [2].

- Restore functionality at the cellular level and eliminate metabolic disorders.
- Normalize the processes of processing useful components from food.
- Restore complex biochemical reactions occurring in the human body.
- Establish the production of the energy necessary for normal life.

MATERIALS AND METHODS

Lipid metabolism disorders occur due to failures in the absorption and breakdown of lipids (fats) with the formation of accumulation and appearance of excess weight or active processing and exhaustion. This directly affects human morbidity and the occurrence of severe pathologies of the gastrointestinal tract, blood vessels. Medicines to improve fat metabolism include various agents:

- ✓ Enzymes;
- ✓ Metabolics;
- ✓ Antioxidants;
- ✓ Fibrates;
- ✓ Statins (lowering cholesterol);
- ✓ Combined metabolism correctors.

Vitamins for impaired lipid metabolism include Fish oil, Nicotinic acid, vitamin E (retinol acetate or palmitate). Metabolism of vitamins, micro- and macroelements Pharmacological drugs that help improve the metabolism of vitamins and minerals are prescribed in the event of [3]:

- deficiency of these elements in the body;
- excessive intake with food;
- failures in breakdown and absorption;
- imbalance of vital systems.

RESULTS AND DISCUSSION

As a result of hypovitaminosis or hypervitaminosis, deficiency of micro- and macroelements, a huge range of severe pathologies arises. Imbalance of these components causes diseases, is reflected in the condition of hair, skin, nails, and directly affects a person's appearance.

For example, iodine deficiency leads to the development and progression of thyroid disease, imbalance of thyroid hormones. Against the background of hormonal failure, weight changes occur. Excess of this microelement in the body is also dangerous, it can cause failures in the endocrine system. Therefore, it is recommended to use drugs as prescribed by a doctor.

A huge selection of multivitamin complexes with the rarest vitamins and microelements allows you to undergo a full course of treatment and restore the lost balance.

Exceptional correction of mineral metabolism is carried out with drugs containing iron, copper, zinc, phosphorus, calcium, chromium and others. Ferrum-LEK, rich in iron, allows you to replenish your body with this useful element. This complex is prescribed for iron deficiency anemia, pregnancy.

Protein metabolism disorders

Insufficient intake of protein and amino acids and metabolic disorders lead to exhaustion of the body,



weakened immunity, and decreased transport function for the delivery of nutrients. This deficiency causes protein-energy deficiency, which is eliminated by various drugs [4]:

- anabolics;
- amino acids;
- vitamins and minerals;
- immunomodulators;
- general tonic compositions.

In case of insufficient endocrine regulation, adaptogens and general tonics are prescribed. Deep exhaustion and dysfunctions arising from the lack of protein in food are eliminated by drugs to improve metabolism for parenteral and enteral administration, respectively, by injection into a vein and through a tube.

Carbohydrate metabolism disorders

Diabetes mellitus, pancreatitis, arterial hypertension and other diseases occur against the background of carbohydrate metabolism disorders. The body is not able to independently process the main sources of energy resources, such as:

1. glucose;
2. fructose;
3. galactose;
4. glycogen.

Drug therapy includes drugs to improve metabolism depending on the type of failure that has occurred in the body. For this purpose, enzymes, antienzymes, hypoglycemic agents, drugs that regulate uric acid metabolism and others are used. The doctor prescribes Cocarboxylase, ATP, Vitrum Cardio Omega-3, multivitamin complexes.

The appearance of metabolic failures in muscles provokes the development of severe neuromuscular diseases. This leads to disruption of the heart and blood vessels. In these cases, antioxidants, cardioprotectors, enzymes, antienzymes and other drugs are used.

Violation of water and mineral balance leads to edema, kidney disease, pressure surges, excess fluid in tissues and other pathological processes. Antioxidants, acid-base balance regulators (ABS) are prescribed.

In each case, an individual scheme is recommended:

Prescribing and taking medications.

Special diet.

Radical lifestyle changes.

Correction of physical activity.

Sleep patterns to improve brain function.

An important condition in the treatment of obesity is to establish the causes of the disease and excess weight. Before losing weight, metabolic disorders are first eliminated. These two phenomena are closely

interconnected, in this case it is better to consult a doctor.

CONCLUSION

The patient is prescribed laboratory tests of blood, urine, other tests and based on the results, corrective therapy is recommended.

Preparations for lipoprotein metabolism disorders with the addition of drugs that affect appetite, as well as enterosorbents.

Special complexes to replenish the deficiency of vitamins, micro- and macroelements in the form of tablets, dragees and solutions.

Modern mono-preparations and complex medications allow you to maintain your body in perfect shape and prevent the occurrence of failures and deficiency conditions.

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