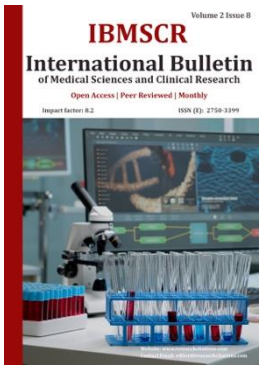

MORPHOFUNCTIONAL CHANGES THAT OCCUR IN THE INTESTINE AS A RESULT OF DRINKING GROUNDWATER

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Abstrakt. The data on the study of the effects of groundwater with a high chemical composition on the body by clinical and experimental methods, the determination of immunological, cytogenetic, hematological and other clinical and laboratory parameters arising in the body under their influence, and the comprehensive diagnosis of diseases caused by groundwater with a high chemical composition are presented.

Keywords: compensator-adaptation to seasonal waters, groundwater and interplastic waters, active sulfhydryl.

Groundwater is water in a liquid, solid (icy), evaporated state, located in the porous cavities of rock layers in the upper part of the earth's crust. Groundwater is part of the total water resources and is of great importance to the national economy as a source of water supply and irrigation. The reclamation status of irrigated lands is determined by the state of groundwater. The science of hydrogeology studies groundwater. Water can be bound by molecular forces and be in a gravitational or free state under the influence of gravity or pressure difference. Layers of unrelated water-saturated rocks are called aquifers, they form aquifers. Groundwater by the nature of occurrence in water—retaining rocks is divided into porous (in soft rocks), gorge (vascular) - in hard rocks and karst (cave) (fractured karst-in easily soluble carbonate and gypsum rocks). According to the conditions of occurrence, groundwater is divided into groundwater.

By origin, groundwater is divided into infiltration, formed as a result of absorption of atmospheric precipitation, river and irrigation waters; condensation, formed as a result of condensation of water vapor in rock formations; sedimentation, formed as a result of burial of marine waters during the formation of sedimentary rocks, and washing, formed during the cooling of magma or emerging from the Earth's mantle. The natural outlet of groundwater to the surface of the Earth is called a bulok (spring) and is divided into flowing and boiling (hot spring). Groundwater is a natural solution that contains almost all known chemical elements. According to mineralization (the total amount of substances dissolved in water, g/l), groundwater is divided into fresh (up to 1.0), brackish (1.0—10.0), brackish (10.0— 50.0) and Namakob (more than 50). And according to temperature, they are divided into cooled (up to 4 °), cold (4-20 °), warm (20-37 °), hot (37-42 °), boiling (42-100 °) and super-boiling.

There are more than 150 large groundwater deposits in Central Asia. Their annual renewable operational reserves exceed 1,500 m3/s, the contribution of fresh water is close to 1,000 m3/s, and the rest is mineralized to varying degrees (from 2-3 to 15 g/l). In Central Asia, there are more than 40 thousand drilling wells in operation, of which about 5 thousand are artesian wells from which water flows; Many of them were used for irrigation of crops. Any external physical, chemical and biological impact on a living organism leads to a change in the structure and function of the organs of this organism. As a result, the body reacts by

changing clinical and laboratory parameters, including organ morphology, within the framework of compensatory and adaptive mechanisms. Among the external influences, one of the most common currently is the consumption of water of various compositions containing more than necessary amounts of salts, macro- and microelements.

Scientific studies of clinical and laboratory aspects of the disease caused by exposure to groundwater with a high chemical composition have been carried out, scientific results have been obtained, including the effect of groundwater with a high chemical composition on the body in various forms and a new approach to its treatment has been created. Scientific research has been conducted on the clinical and laboratory aspects of the disease caused by exposure to groundwater with a high chemical composition, scientific results have been obtained, including the effect of groundwater with a high chemical composition on the body in various forms and a new approach to its treatment has been created (Memorial Sloan-Kettering Cancer Center in New York, USA; the radiation injury Treatment Network, USA, morpho-functional changes in the intestine, as well as the pathogenetic role of the immune system, are shown in the formation of this pathology.

EP types of groundwater include: according to the conditions of occurrence, groundwater is divided into groundwater, seasonal, groundwater and interplastic. Groundwater is a natural solution that contains almost all known chemical elements. According to mineralization (the total amount of substances dissolved in water, g/l), groundwater is divided into fresh (up to 1.0), brackish (1.0—10.0), brackish (10.0— 50.0) and Namakob (more than 50). And according to temperature, they are divided into cooled (up to 4 °), cold (4-20 °), warm (20-37 °), hot (37-42 °), boiling (42-100 °) and super-boiling (above 100 °) groundwater. Groundwater with a high chemical composition penetrates the body only during the period of its exposure, under the influence of which various morphological and functional changes occur in the body. Groundwater with a high chemical composition can enter the body through the skin, gastrointestinal tract, and respiratory tract. It then spreads through the bloodstream and lymph to other organs and tissues.

The indirect effect of groundwater with a high chemical composition is explained by the formation of radiolysis of water, which accounts for 70-80% of the body, when water is ionized, radicals with oxidative and alkaline properties are formed. The formation of atomic hydrogen, hydroperoxyl radicals, and hydrogen peroxide is also important. Oxidizing free radicals enter into an enzymatic reaction, as a result of which active sulfhydryl groups are converted into inactive disulfide compounds. These biochemical processes lead to a decrease in the catalytic activity of enzyme systems, which, in turn, leads to a decrease in the amount of DNA and RNA in the nuclei of cells, which disrupts their regeneration processes. In the intestine, food is digested in a continuous motion, nutrients are absorbed into the blood, undigested food residues turn into feces. This wall is a member of basically 3 floors. The inner mucous membrane through which digestive juices and mucus exit from the digestive glands.

In humans, the intestine is quite long and consists of 2 parts: the small intestine and the argon intestine. The human intestine fills the abdominal cavity and pelvis, which lie below the liver and stomach. The front of the penis is covered with a large charvi. The intestinal walls are rich in blood and lymphatic vessels, lymphatic elements, glands and nerves. The activity of this organ is associated with nervous and humoral mechanisms (Q. Neuro-humoral regulation). Man and most animals I. it will contain various microorganisms (intestinal flora).

Of these organ diseases, appendicitis, colitis, protitis, enteritis, enterocolitis, intestinal torsion and intestinal tumors are more common.

People with intestinal diseases should refrain from eating foods with acute effects. It is harmful that the chair does not come out on time. El, stored in unreleased form, often forms droppings because it drives the droppings up. Coulange's disease, which occurs in the colon and adjacent intestines, leads to increased pain, difficulty defecating, decreased appetite and unwillingness to eat fatty and sweet foods. The patient has redness of urine, nausea, thirst. Then these signs intensify, and constipation stops completely. In addition, the cause of intestinal diseases are colds of the intestine and the appearance of ulcers in it, excessive consumption of various foods and drinks.

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