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PROBLEM ASPECTS OF DIAGNOSTIC, TREATMENT AND PREVENTION OF URINARY DIATHESIS

The entire material world around us consists of ordered and chaotically arranged molecules of various elements. The first are represented by crystalline substances, which are the majority in nature, the second - amorphous. Mineralization in living nature is quite widespread. It carries a physiological functional load, or it can be a sign of a pathological process in the body. Passing salt crystals in the urine is a normal thing. The kidneys, which perform the function of cleaning the body, also remove excess salts that enter the body with food. Their nature directly depends on the products we use. Man and the environment are a single ecosystem. And the slightest changes in the process of exchange between them immediately or over time will necessarily lead to a violation of the balance. The formation of mineral-organic structures as a result of the violation of homeostasis between colloids and crystal-forming substances does not contribute to the functional stability of the organism and leads to pathological manifestations. One of which is urolithiasis. However, a significant excretion of uniform salts is sometimes presented by doctors as a diagnosis: urinary diathesis, the validity of the latter has not been proven today due to the inability to correspond to certain nosological units. First of all, diathesis is translated as "tendency" to any pathological condition that can turn into a disease [1, p. 14]. Urinary diathesis reflects the state of the kidneys, joints and other internal organs.

Urinary diathesis is often considered as a synonym of neuro-arthritic diathesis, which is one of the variants of the abnormality of the constitution. At the same time, the "constitution" characterizes the set of morphological and functional properties of the child's body, which determine the individual features of its reactivity. A diathesis, or otherwise an anomaly of the constitution, characterizes the peculiarities of one or another type of exchange, which under certain conditions must be realized in a pathology [2, p. 238; 3, p. 29].

Today, it is believed that salt diathesis is a condition of the body caused by a hereditary predisposition, which is characterized by an increased formation of salts and, as a result, the accumulation of concretions (stones) in the renal bowls of various sizes and origins: calcium oxalates, urates, carbonates, phosphates, and as well as their combination. This is also a condition in which the so-called echo-positive inclusions are determined in the kidney bowls during an ultrasound examination. The presence of so-called urinary sand can be accompanied by inflammation of the urinary tract, the release of an increased amount of salts with urine, and the presence of dysuria. Salt diathesis can be diagnosed even in infants as a hereditary disease. But in practice, such cases occur quite rarely, in most cases, salt diathesis manifests itself at a sufficiently mature age. At the same time, it should not be noted that in most people, the signs of salt diathesis can be determined using ultrasound starting from the age of 20.

Today, it is possible to use ultrasound to determine the signs of salt diathesis before its pronounced clinical manifestations. However, it should not be forgotten that salt diathesis is not only related to kidney pathology. There are various reasons for the formation of inclusions in the kidney bowls that can be determined by ultrasound. Salt diathesis is the result of a number of disorders in the body. Therefore, these patients should be carefully examined to find out the causes of excessive excretion of salts in the urine [4, p.155].

It should be noted that echo-positive inclusions, which are determined during ultrasound in the parenchyma of the kidneys, are not always a focal accumulation of salt in the renal pelvis. This can significantly complicate the diagnostic process, especially in mature and elderly people. Echopositive shadows in them occur not only as a result of any pathological changes in metabolism, but also as a result of morphological changes in the parenchyma, arising as a result of age-related or pathological changes in the vessels of the parenchyma (atherosclerosis) or in the parenchyma itself under the action of damaging factors (nephrosclerosis, accumulation of salts in connective tissue, etc.).

We use the following method for differential diagnosis of salt accumulations in the renal pelvis and other echo-positive inclusions in the parenchyma. At the initial determination during ultrasound of echo-positive shadows without any clinical signs of salt diathesis, we prescribe litholytic therapy using herbal preparations or official herbal preparations (phytoteas) with a litholytic effect and increase water consumption (if the patient has no contraindications for this) for 3 months. After that, we conduct a control ultrasound with a comparison of the obtained data with the previous ones. Under the conditions of salt diathesis, the number and size of echo-positive inclusions should become different from the previous values. The method was used in 48 patients. The presence of salt diathesis was confirmed in 15 people.

Due to the fact that diathesis is not a disease, but only determines certain features of metabolic processes, treatment measures primarily concern a set of measures to prevent and prevent the development of possible pathology [5, p.240; 6, p. 218]. The treatment of salt diathesis depends, first of all, on the size of the accumulations and the characteristics of the salts that leave the body. A conservative or medical treatment method consists in taking diuretics to stop the accumulation of sand in the kidneys. The second group of drugs stimulates the splitting of sand. Treatment is also supplemented with anti-inflammatory drugs due to the fact that the sand that comes out of the urinary tract can injure them and lead to inflammation.

If the cause of the diathesis is a genetic tubulopathy or an acquired defect in the functioning of the renal tubules, then these disorders cannot be corrected. Therefore, with salt diathesis, diet and water regime are of primary importance. Every patient who has identified changes in the urine analysis and echo-positive inclusions in the renal pelvis should take care to consume at least 2-2.5 liters of fluid daily (if there are no contraindications for this from the cardiovascular system). In a hot climate, this amount should be increased based on the actual needs of the body.

Further recommendations depend on the type of salts that are determined in the urine and forced the clinician to establish a diagnosis of salt diathesis. A diet with a significant amount of oxalates requires elimination from the diet of foods rich in oxalic acid (rhubarb, figs, sorrel, tomatoes, spinach), and an increase in urate levels implies a decrease in the consumption of meat, offal, as well as beans, chocolate, coffee and cocoa .

It should be taken into account that a certain amount of organic salts is released into the lumen of the intestine through the hepatobiliary system, after which it is reabsorbed into the blood. To break this circle, in the treatment of salt diathesis, enterosorbents are prescribed, which absorb toxic components and remove them from the body.

Phytotherapy (phytopreparations with a mild diuretic effect) and diuretics are also included in the scheme of treatment of salt diathesis, however, both the collection of medicinal herbs and medicinal measures with a diuretic effect must be prescribed by a doctor.

Conclusions. The first direction in the treatment of salt diathesis is the correction of the diet, the use of an individual diet according to the composition of the salts excreted in the urine. This is the simplest, but at the same time the most difficult way in the rational treatment of salt diathesis: purposeful actions must be constant and regular.

The second direction of salt diathesis treatment is the rational and adequate selection of medical measures to improve the ability of the kidneys to purify the blood, cleanse the body, and remove various salts with urine.

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