



Study of Prevention of Kidney Stone Disease

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Annotation: Kidney stone disease is a chronic disease characterized by the formation of stones in the urinary tract: calyces, pelvis, often with migration to the ureters, bladder, and urethra. In some cases, calculi are initially formed in the bladder as a result of benign prostatic hyperplasia, urethral stricture, postoperative ligatures of the bladder wall. Preventive measures prevent serious complications.

Key words: Kidney stone disease, prevention, nephrons, salt, water consumption.

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This disease develops as a result of a metabolic disorder in the body due to various reasons, as a result of which stones are formed from the constituent parts of urine. This is a multi-causal disease, often leading to the development of formidable complications. Prevention is primary to prevent the disease and secondary to eliminate the recurrence of the disease after treatment. The basis for preventing the formation of stones and manifestations of KSD is the normalization of metabolism, as well as maintaining the normal composition of urine. Urine contains substances that are in a dissolved state. If the balance between them is disturbed, the salt falls out and forms stones. They can occur in the bladder, ureter, kidneys, that is, along the entire path of urine formation. Deposits arising from metabolic disorders for external or internal reasons are called urolithiasis. The disease can occur at any age. Prevention of urolithiasis is very important both for preventing the formation of stones and for their successful destruction. To completely get rid of stones or prevent their occurrence, it is important to know about methods for preventing stone deposits. All preventive measures are aimed at eliminating the cause of stone formation. After medical or surgical treatment, the body needs support so that the stones do not start to form again. To avoid disruption of metabolic processes in the future, the patient needs to monitor his diet. Nutrition should be balanced, contain a sufficient amount of vitamins and minerals. You need to give up fast carbohydrates, fast food and convenience foods. In order to avoid stagnation of urine, the body must pass a sufficient amount of fluid through itself. The optimal amount of water consumed is at least two liters per day. This is only drinking water. But drinking water, which is used daily to quench thirst and cook food in our region, is highly mineralized (as can be judged by the scale that forms on the walls of vessels when water is boiled). Mineral waters should be mentioned separately. Most people eagerly use mineral waters, not only to quench their

thirst, but also to dilute juices and alcoholic beverages. In fact, due to the high salt content, mineral waters are contraindicated for everyday use; only a doctor can recommend them as a remedy and in small quantities with an individual drinking regimen. Sleep and rest is an integral part of the prevention of urolithiasis. Dietary nutrition is selected according to the conclusions of diagnostic studies. Solid deposits that occur in the cavity of the bladder, ureter, or excretory tract are divided into three main groups: oxalates, urates, and phosphates.

With oxalates, dietary nutrition is prescribed, including foods high in magnesium. It neutralizes oxalic acid, which is the culprit in the occurrence of this type of calculus. Cocoa products, sorrel and spinach, peppers and citrus fruits are excluded from the menu. But bread and peas must be in the diet. With the formation of urates, it is recommended to consume as much dairy products as possible, as well as vegetables and fruits. Nutrition should alkalize the urine environment in which stones form. It is better to completely refuse meat, offal, canned fish. The fight against phosphate stones involves nutrition, including meat products in any form and quantity. The diet is enriched with grapes and juice from it, tomatoes, rice, and buckwheat. It is required to give up calcium, so milk, eggs and cheese are excluded from the menu. In addition to dietary nutrition and the rejection of certain foods, you have to go to other restrictions. The patient after treatment and the person at risk will have to reconsider their habits in order to improve the quality of life and avoid future exacerbations of the disease. First of all, you should follow the daily routine and allocate enough time for rest and good sleep. Excessive daily activity should be excluded, but sedentary work can only aggravate the course of the disease. Inactivity leads to a slow outflow of urine, first sand is deposited, which, during normal activity, is washed out on its own. But if this does not happen, the sand turns into hard stones. Light exercise, jogging and walking in the fresh air will help prevent the recurrence of the disease. Giving up bad habits, such as smoking and drinking alcohol, will not only benefit urolithiasis, but will also have an overall positive effect on the body. But in some cases, diet and adherence to the drinking regimen may not be enough, and due to other factors, stone deposits still occur. This is where drug therapy comes in. Drug prevention of urolithiasis in women and men may differ, but not significantly. Medicines are prescribed only by a doctor and only after diagnosis and clarification of which stones are deposited in the patient's urinary tract. Drug prevention of urolithiasis prevents the development of the disease, but the components that make up the drugs may have a side effect on the functioning of other body systems or may be completely contraindicated for use if the patient has concomitant diseases. There are alternative methods to prevent the formation of stones that do not affect the functioning of the body as a whole. In the treatment and prevention of urolithiasis, medicinal herbs with a diuretic effect are used: wild rose, knotweed, heather, sage, St. John's wort, chamomile, peppermint. This is not an exhaustive list, there are many other plants that can get sand and small stones out before they become a problem. In addition to diuretic effects, drugs of natural origin have anti-inflammatory, antimicrobial and analgesic properties. Regular use of infusions, decoctions of herbs strengthens the body, removes toxins and prevents the deposition of stones. After examination and clarification of the diagnosis, establishing the nature of deposits in the bladder, kidneys, ducts and ureter, treatment is carried out, which will be successful only if all the doctor's prescriptions are followed. When the stones are destroyed or leave the body, either surgically or naturally, recommendations must be followed so that stones do not form again.

The patient needs to learn a few rules:

- eat food in small portions;
- to exclude overeating and the use of harmful products;
- reduce salt intake;
- increase the amount of liquid consumed, but refuse to use mineral waters;
- give up alcohol.

It is possible to conduct spa treatment to prevent exacerbations, but these are special sanatoriums with medicinal waters that have an alkalizing effect. So, urolithiasis is a disease that can create serious problems for the patient. Therefore, the prevention of stone formation should be given sufficient attention.

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