



Vitamin D Deficiency in Children of School Age Bone Pathology

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Abstract: Vitamin D deficiency, that is, rickets, is a disease that occurs only in young children with life-long complications. It is caused by a lack of vitamin D in the child's body. The body needs calcium and phosphorus elements for the development of the child, especially for bone growth and strength. Vitamin D controls the absorption of calcium and phosphorus from the intestine, their delivery to bones, muscles and other body tissues. This article provides information on the complications of vitamin D deficiency in children under school age.

Keywords: Rickets, vitamin, phosphorus-calcium metabolism, bone, premature birth, therapeutic gymnastics, lick.

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Rickets is a disease that occurs in young children and is caused by disturbances in the metabolism of calcium and phosphorus in the body. The first years of a baby's life pass quickly. For the proper growth of bones, vitamin D controls the absorption of calcium and phosphorus in the body from the intestine, reaching the bones and other tissues. Rickets develops due to lack of vitamin D. Vitamin D comes in a small amount with food, most of it is synthesized in the skin under the influence of sunlight.

Rickets (Greek rhachis - spine), shirzada - a disease that occurs in young children. Due to the lack of vitamin D in the body, it is caused by a violation of phosphorus-calcium metabolism. Rickets is often caused by a child's premature birth, weakness, and artificial feeding. If the child is not properly cared for, does not enjoy the open air and sunlight, is fed improperly, vitamin D does not enter the body in sufficient quantity, or the formation of vitamin D in the skin is disturbed due to the lack of ultraviolet rays, and the disease of rickets increases. In addition, the frequent illness of the child, the violation of the mother's diet during pregnancy also cause rickets. Rickets leads to metabolic disorders and dysfunction of various organs and systems. In this disease, the exchange of mineral salts such as phosphorus and calcium is particularly strongly disturbed. Absorption of calcium in the intestine and deposition in bones changes, which causes bone thinning, tissue softening, nervous system and internal organs malfunction. In the initial period of the disease, changes occur in the patient's nervous system: the child becomes timid, nervous, capricious or moody; he sweats a lot, his face sweats when he sucks, and his neck sweats when he lies down. Because the child is bothered by itching, he puts his head on the pillow and his back hair falls out. When the disease worsens, the muscles become weak and twitch; A sick child walks late compared to a healthy child, the abdomen is swollen, the inside is often hard or pushing, and then the bone system changes: the shoulder bone flattens, the head gets bigger, the forehead and top of the head bulge out, the forehead becomes lumpy, the top of the head and the bone in the neck area softens.

observed. The large skull does not ossify in time. Often, the ribs near the sternum are thickened. When a child begins to walk, the legs bend in an X shape or an O shape. The shape of the chest also changes: it either bulges forward or sinks in.

Children with rickets are susceptible to various infectious diseases (especially measles). Prevention of rickets begins in the prenatal period. A pregnant woman should be in the fresh air as much as possible, strictly adhere to the regime, eat properly. After the birth of the child, it is necessary to follow all the rules of care and breastfeed as much as possible.

In the treatment of rickets, according to the doctor's instructions, vitamin D is given together with other drugs. If necessary, therapeutic gymnastics, massage, irradiation with a quartz lamp are carried out according to the doctor's recommendation.

Symptoms:

- child's sleep disturbance;
- profuse sweating while breastfeeding;
- fear of sound and light;
- skin rashes;
- hair loss on the back of the head;
- capriciousness, restlessness.

Complications:

Softening of bones, relaxation of muscles and joints, weakening of immunity, anemia are observed. The child struggles to keep his head and body upright, his slurred speech slows down. Teething is delayed. Frequent colds. If not treated in time, as the child grows, the chances of crooked bones increase. Bending of the spine, downward bending of the chest, bending of the leg in the form of "X" or "O", flat feet appear. Incorrect development of internal organs, mental retardation may occur.

Prevention: During pregnancy, it is possible to walk in the fresh air for at least 2 hours a day, and take calcium supplements according to the doctor's prescription. In the winter season, it is necessary to eat vitamin-rich products and drink additional vitamin D. After birth, the child should be nursed exclusively with mother's milk for up to six months. During breastfeeding, the mother should consume vitamin products. When switching to complementary foods, it is necessary to pay attention to the presence of products such as meat, eggs, fish in the child's menu.

Do not forget to walk in the open air as much as possible during the day. According to the conclusion of the research, to ensure a sufficient dose of vitamin D, it is necessary to get sunlight every day or at least three times a week, with the face and hands open during the day. If the skin is white, five minutes; if it is wheat, half an hour is enough. Also, gymnastics and massage are recommended to develop and strengthen joints and spine.

Treatment of rickets: Often, special treatment for rickets is done with drugs containing vitamin D or calcium supplements. However, it should be remembered: this vitamin is harmful in large quantities, so carefully follow the doctor's instructions. An overdose can worsen the child's condition. It is better to take medicines for the treatment of rickets before lunch. After vitamin therapy and active bone mineralization, the child may be nervous and unable to sleep for a long time. Also, the treatment includes proper nutrition, enough walking in the fresh air, physical therapy, therapeutic massage, physical therapy exercises, sun and medical baths, and other recovery methods are important. In difficult cases, the help of a surgeon or orthopedist may be

needed. The effects of rickets cannot always be corrected with a shock dose of vitamin D. Sometimes doctors correct the curvature of the spine and bones with the help of special corsets, medical shoes and surgery.

Prognosis: Usually, the prognosis for children with classic rickets is favorable. But if there is no treatment, irreversible changes can occur. Among them are deformation of bone structures, dyskinesia of bile ducts, kidney dysfunction, as well as various skin diseases (in particular, psoriasis) and other complications mentioned above. Prevention of rickets Prevention of rickets includes the following procedures:

The expectant mother should start preventing her child's rickets during pregnancy with non-specific methods (including pay attention to the nutritional balance - the diet should include vegetables, cottage cheese, fruits, meat should take); timely treatment of anemia and toxicosis during pregnancy; spend more time in the open air during pregnancy; your main task is to ensure that the child's routine is enough for him to walk in the fresh air, exercise, rational nutrition, encourage physical activity, organize massage and gymnastics; preventive treatment with vitamins D and B (doctor's recommendation and under control);

During the examination, parents will be asked questions about the child's general health, diet, genetic diseases, and changes in the body. After that, the pediatrician can advise you to visit narrow specialists - an endocrinologist and an orthopedist. If adults get sick (non-classic forms of rickets), they should consult a therapist.

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