



## COMMON INTERNAL PARASITES AND THEIR TAXONOMY AMONG YOUNG CHILDREN IN UZBEKISTAN

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### Abstract

Infectious and parasitic diseases are still an important problem in the health care system of the republic. Small worms that live at the expense of organs and tissues of humans and animals are worms (helminths), and the diseases they cause are called helminthiasis. Human helminthiasis has been known since ancient times and accounts for 90% of all parasitic diseases. The source of the disease are sick people and animals infected with worms .

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## Introduction

Depending on the type of pathogen, route of transmission and infectious factors, helminthiasis is divided into three :

Biohelminthiasis. This type of disease requires an intermediate host, a living organism - that is, a biological environment - for the worm larvae to reach the stage of invasion (infection rate) .

Geohelminthiasis. In this type of helminthiasis, the process of maturation of larvae to the stage of infection occurs in the soil.

Contagiosis. Contagiosis, ie helminthiasis transmitted through contact - this type of helminth is transmitted directly from person to person through dirty hands, his underwear, sheets, laundry and household items. Infectious worms include enterobiosis and hymenolepidosis [ 1].

The most invasive of infectious helminthiasis is enterobiosis, which accounts for 76.2 % . According to the World Bank , helminthiasis ranks 4th among diseases that cause economic damage to public health. Several hundred species of helminths (250 to 360) are known to cause disease in humans. Parasitosis is common among the world's population, affecting more than 4.5 billion people worldwide. %. About 250,000-300,000 helminths are officially registered in Uzbekistan each year, but taking into account corrective factors, the actual number could be as high as 22 million, including animals and people with low socioeconomic standards. 164 children aged 7 to 17 years were under supervision, of whom  $49.4 \pm 3.9$  per cent were children aged 7 to 17 years. Infectious helminthiasis in children was mainly detected during regular medical examinations of  $54.3 \pm 5.5\%$  (44 children) . In isolated cases , two children with infectious helminthiasis were diagnosed with  $2.5.5 \pm 1.7\%$  enterobiosis. Studies have shown that a proportion of children,  $43.2 \pm 5.5\%$  (35 people), often went directly to the doctor with complaints of itching in the perianal area in the evening or at night,  $43 , 2 \pm 5.5\%$  (35 children); as well as  $22.2 \pm 4.6\%$  (18 children) of sleep disorders (disturbed sleep) and nausea of  $12.3 \pm 3.6\%$  (10 children). When enterobiosis was detected on medical examination, no clinical complaints of the disease were observed in  $56 , 8 \pm 5.5\%$  (46 children) [2].

## Introduction

A few months after birth, the child begins to move actively, he begins to feel the world around him with the sensory organs, first of all - with his hands. With the help of his hands, he touches what is caught, walks 4 "feet" on the ground and



puts his fingers in his mouth. In this way, the eggs of all parasites enter the child's body. The most common parasite in children is oysters (simple worms), which cause enteribiosis. These helminths are small, about 1 cm in size, white-gray in color, with a curved body. The location of these parasites is the colon, and sometimes they can also be located in the lower part of the small intestine. The proliferation of ostriches takes place around the skin of the anus. At night, the female ostrich goes to the folds of skin to lay her eggs, and in girls it often goes to the lips of the vagina. These helminths live 1-1, 5 months. A child's self-harm causes him or her to become restless for years. The parasite can be seen with the naked eye and in feces.

The entry of oysters into the gastrointestinal tract means that the organism is infected with the parasite. Ostrich eggs fall into the external environment with contaminated feces. The outer shell of the eggs is resistant to adverse environments and is very small in size. The child touches everything with his hands and takes them to his mouth in order to study the environment, to know the taste and composition of the objects. In this way, the ostrich's eggs enter the body of its "future little master."

Because the child's body has a low ability to fight, the parasite can easily multiply. Vomiting can also be caused by unwashed fruit and contaminated water. Often the damage can be observed when children interact with animals, even when they are playing in the dirt and sand where the garbage has fallen. Children do not wash their hands after playing in the street, parasites enter the body at this time. Therefore, all children can be severely affected by living conditions and upbringing environment. If a child has worms, the following symptoms are observed:

- Weight loss, pale skin color, weakness, dizziness;
- Rise in body temperature;
- Headaches, sleep disturbances, and mood swings.
- By the intestines - constipation, diarrhea, abdominal rest and pain, nausea and vomiting, pain in some parts of the abdominal area;
- Allergic conditions - itching, rash, cough, inflammation of the mucous membranes of the respiratory organs;
- Infection with other infectious diseases as a result of weakened immunity.

Prevention of oyster helminths. Prevention is more important than cure. Conditions for not being infested with helminths are very easy and effective, as long as they are followed. They are:



- Wash hands with warm soapy water 2 times before eating ;
- Always carry nails;
- Changing young children's clothes;
- Regular cleaning of children's rooms;
- Do not keep pets in homes with young children;
- Family treatment against helminths once a year ;
- Make sure that children do not put their hands in their mouths during the trip [ 4].

Causes cystic echinococcosis, a neglected infectious disease that is a major health problem in developing countries . Despite being under constant influence of the immune system, *E. granulosus* antiparasitic modulates immune responses and persists in human hosts with defined humoral and cellular responses to the parasite. Although p aspects have been identified, the establishment of complete mechanisms that cause disease requires further research [ 5]. Recently, the World Health Organization included echinococcosis in the neglected Zoonosis subgroup for its strategic plans to control neglected tropical diseases in 2008-2015. *E. granulosus* contains a number of forms that exhibit significant genetic variability . Ten strains of *E. granulosus* (G1-10) were described by molecular biology techniques using a mitochondrial DNA sequence. These include ordinary sheep strain (G1), Tasmanian sheep strain (G2), two cow strains (G3 and G5), horse strain (G4), camel strain (G6), pig strain (G7), uterine strain. enters. strain (G8), Polish pig strain (G9) and Eurasian deer strain (G10). Recent molecular reassessment of *Echinococcus* species clearly demonstrates that *E. granulosus* is an overly simplified species. Genotypes from G1 to G5 were reclassified to *E. granulosus sensu stricto* (G1 to G3), *E. equinus* (G4) , and *E. ortleppi* (G5). Genotypes from G6 to G10 and the lion strain of *E. granulosus* (formerly *E. felidis*) should be re-evaluated [ 6].

*E. granulosus* is a small tapeworm (length rarely exceeding 7 mm), which lives firmly in clear hosts, usually in dogs, clinging tightly to the mucous membrane of the small intestine, where the adult stage reaches sexual maturity within 4-5 weeks. The cyst cavity is filled with cyst fluid (HCF), a key factor responsible for antigenic stimulation.

*Echinococcus* eggs pass into the blood from the intestines of humans and domestic animals; The blood travels to the liver, lungs, brain, and other organs, where it becomes an echinococcal cyst. If the cyst is multicellular, it is called alveococcosis. Cysts enlarge and compress the surrounding tissue, resulting in



atrophy and disruption of the organ. If it ruptures, the absorption of fluid inside the body can lead to poisoning and allergies, and rupture can be life-threatening . [7]

In humans, the symptoms of the disease vary depending on which organ is affected.

In hepatic echinococcosis, the patient becomes dehydrated, there is pain under the right rib, the liver becomes heavy and enlarged, jaundice is observed;

In pulmonary echinococcosis, the patient may have chest pain, cough, shortness of breath, and vomiting of blood;

Brain echinococcosis causes headache, dizziness, and impaired motor and sensory function.

When symptoms of echinococcosis appear, it is necessary to consult a doctor. Proper care of pets to prevent the disease, timely veterinary inspection, personal hygiene (washing hands after playing with or caring for a dog, washing vegetables before eating and then rinsing with boiling water), children's street Dogs should not be allowed to play with dogs. Treatment is based on the affected organ and symptoms [ 8].

## Conclusion

To drink only boiled water from open pools, always eat well-cooked and fried meat. When symptoms of helminthiasis appear, it is necessary to consult a specialist immediately. Submission of more appropriate laboratory tests and timely completion of timely treatment on the advice of a doctor will allow the patient to overcome the disease without serious complications and quickly get back on his feet . is a "companion". Through this article you will find answers to questions such as whether to be afraid of them, when and how to treat them, what to do to prevent children from getting sick.

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is an important route of human infection for zoonoses transmitted through large amounts of food and water. It is estimated that nearly half of the world's population suffers from water- and food-borne infections, with food and water-borne parasitic zoonoses contributing greatly.

Such epidemics have occurred mainly as a result of drinking contaminated water in camps, parks, recreation areas and institutions, including day care centers and swimming pools. Diseases are common in the summer, which can be due to pollution of water sources or overcrowding of sensitive people who use swimming pools. Social changes in the labor force in developed countries have led to an increase in the number of children placed in day care centers. as such, means that water-borne zoonoses, in particular Giardia, Cryptosporidium, and Toxoplasma, will continue to bear an increasing burden. deterioration of health in the coming years.

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