

Study of Intestinal Worms in Children

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Annotation: Many children complain of stomach pain and this pain is not stable, but comes and goes. The more severe n is, the stranger symptoms appear, but they quickly disappear.

This is the confusing thing about the subject. No method can be used to find out the real reason behind all these symptoms, especially the regular tests that I tried to perform on the patient may not help you discover the real reason behind this pain. The truth is that stomach worms are a serious disease that affects age groups, especially young children who play in the street, sand or dirt, or eat exposed food or sweets exposed to wax, dust and dirt as a result of bad weather and picking things up from the ground without washing them. These conditions are one of the pathological causes of stomach worms. They cause fatigue and health problems that are not treated in a timely manner, which cause serious health problems for the child at present and in the future. One of the most important types of worms that pose a danger to the lives of children are intestinal or pinworm worms

Intestinal worms: - Intestinal worms have been known since ancient times and the first to study their life cycle was the researcher Leucheur (1865). They are intestinal cylindrical worms that infect humans and spread among different age groups, but they are more common in children than adults.

They have been given several names, including: stool worm, intestinal worms; pinworm, threadworm. The intestinal worm is characterized by a cylindrical shape and a milky cream color, and the mouth is surrounded by three lips and has a muscular esophagus. The male is 2-5 mm long and has a curved end, while the female is 8-12 mm long and has a long, tapering tail in the last third of the body. The eggs are oval in shape, colorless, flat on one side, and convex on the other side, and their length ranges between 50-60 microns, and their width is 30 microns, and they contain the third larva. Pinworm life cycle: The eggs hatch in the small intestine after being swallowed by the host, then migrate to the large intestine within two weeks, reaching maturity and reproducing sexually in the intestine. After fertilization, the female migrates towards the rectum to lay her eggs around the anus and perineum. One female lays approximately 15,000 eggs. The eggs adhere to the skin by a sticky, liquid substance. The eggs reach the infective stage within 5-24 hours (the third larva inside the egg). Infection occurs from swallowing the infective eggs containing the embryo. The eggs can remain alive in the external environment for at least two weeks. Infection in humans can occur either through infection returning to complete its life cycle, the cause of which is unknown, or through self-infection of the auto industry in the infection by transmission through contamination of the fingers with the infective stage and swallowing it and its passage to the intestine to complete its life cycle. Infection is transmitted directly from the anus to the mouth as a result of contamination of the fingers of the infected person himself or another person. It is transmitted indirectly through contaminated clothing, blankets, food or any other tools. The infection can also be transmitted through dust. Types of dust-borne infections in cases of severe contamination, as the pathogen enters the body through inhalation due to the light weight of the eggs and their arrival to the intestines to complete the life cycle. Therefore, hosts can be of different types, including:- The definitive host: "definitive or final host" is the host in which the parasite reaches sexual maturity or which harbors the adult parasite. The intermediate host: "intermediate host" is the host in which the larval stages grow or in which asexual reproduction of the parasite occurs. The carrier host: "carrier host" is the host in which the parasite does not grow but in which its infectious stages accumulate. The vector host: "vector host" is the host responsible for transmitting the parasite from one host to another (final) and in which the parasite does not grow and is usually an arthropod. The reservoir host: "reservoir host" is a final host that acts as an external source or reservoir of infection, Ways in which intestinal worms are transmitted to children: - Pinworm infection occurs when a person swallows eggs unintentionally. Microscopic eggs can be transmitted to the mouth through contaminated food or drink or through (also contaminated) fingers. Once swallowed, the eggs hatch in the intestine and mature into adult worms within a few weeks. Female pinworms move slowly toward the anus to lay eggs, often causing an itchy anus. When a person scratches the itchy area, the eggs attach to their fingers and move under their fingernails. The eggs then move to other objects, such as saliva or bed sheets. Eggs can also be transmitted from contaminated fingers to food, drink, or clothing. Pinworms can survive for about two to three weeks on the surface of contaminated objects. The most important symptoms caused by intestinal worms in children:-

Abdominal pain, Pale face, Hemoptysis, Difficulty urinating, Central nervous system weakness Chest pain, Chills, Chronic fatigue, Colitis, Cough, Diarrhea, Digestive system disorder Dizziness, Fever, Expansion of various organs, Headache, Vaginitis, Jaundice, Joint pain Weight loss due to malnutrition, Weakness, Immunodeficiency, Nausea / vomiting, Swelling of features Face, Sweating, Insomnia, Skin ulcers, Prolapse of the rectum, Psychological problems, Lung congestion, Memory loss, Itching, especially in the buttocks, Night sweats, Muscle cramps, Hair loss or thinning. There are several ways to detect intestinal worms: These detection methods include several tests 1:- Stool tests for signs of infection, 2:- Blood tests for certain types of parasites, Colonoscopy using a thin camera to examine the intestines for parasites 3:- Imaging tests to examine other organs for signs of damage caused by the parasite

4:- Tape tests: The tape test involves placing a piece of tape over the anus while the person is sleeping to check for signs of eggs. Complications that can be caused by intestinal worms: - A

normal intestinal worm infection does not cause any serious problems, and in rare cases, severe infection may lead to: 1:- Infection of the female reproductive organs, parasites may move in women or girls from the anus to the vagina to the uterus, fallopian tubes and the area surrounding the pelvic organs. This may lead to problems such as vaginitis and inflammation of the inner lining of the uterus (endometritis). 2:- Weight loss, when a large number of pinworms live inside the patient's intestines, these may cause of nutrients, causing the worms to lose abdominal pain and get enough weight. 3:- Urinary tract infection 4:- Weight loss

5:- Inflammation of part of the abdomen (peritoneal cavity). Risk factors for intestinal worms:- Risk factors for intestinal worm infections include the following. 1:- Young age: Pinworm infections are most likely to occur in children between the ages of 5 and 21. The microscopic eggs are easily transmitted to family members, health care providers, or other children at school or child care. 2:- Living in crowded places: People living in residential institutions are at higher risk of infecting with intestinal worms 3:- Living in a temperate climate: Although pinworms infect people all over the world, they are spread to people all over the world. They are more prevalent in countries that do not have a tropical climate. Ways to prevent the transmission of intestinal worms:- Intestinal worm eggs can stick to surfaces, including toys, taps, bed linens, and toilet seats, for up to two weeks. In addition to cleaning surfaces regularly, ways to help prevent the spread of intestinal worm eggs or prevent re-infection include the following: 1:- Wash in the morning.- Washing the anal area in the morning can help reduce the number of pinworm eggs in your body because pinworms lay their eggs at night. Washing can help avoid potential re-contamination in bath water. 2:- Change underwear and bed linens daily.- This helps get rid of the eggs. 3:-* Wash clothes in hot water: Wash bed sheets, nightwear, underwear, towels and tissues in hot water to help kill pinworm eggs. Set the dryer to a high temperature. 4:- Avoid scratching the anal area: . You should avoid scratching the anal area, and make sure to trim your child's nails regularly to reduce the area available for collecting eggs. Advise your child to refrain from biting his nails. 5:- Washing hands: To reduce the risk of infection or spreading it, wash your hands well after using the toilet or changing diapers and before eating. 6:- Commit to washing the clothes and bed linens of the person infected with intestinal worms with soap and hot water daily, even after receiving treatment for several days. 7:- Commit to cleaning the toilet seat and the seat designated for children regularly. 8:- Encourage the child to shower daily, and it should be noted that it is preferable to shower in the morning, because showering in the morning helps to remove eggs better 9:-. Clean the floors in the house, to remove eggs if they are present on them. Clean surfaces in the house that children can touch, such as door handles. 10:- Alert the child not to eat foods that have fallen on the floor. It is recommended to cook meat, fish and poultry at an appropriate temperature and not allow the child to eat them raw. 11:- It is recommended to wash and peel vegetables and fruits well. Treatment methods for intestinal worms: - Many cases of worm infection in children do not require treatment, due to the ability of the immune system to get rid of worms without the need to use medications. It is important to monitor the child during this period and inform the doctor if the child suffers from some symptoms such as: vomiting, fever or high body temperature for more than two days, severe fatigue, dehydration, or any changes in the color of the child's stool, or the appearance of blood in it. It is worth noting that in some cases the doctor may determine the type of worm causing the condition in the child to prescribe one or more types of appropriate antiparasitic drugs. Treatment of intestinal worms Intestinal worms, enterobiasis, enteritis, or pinworms (in English: Pinworms) are defined as small, very thin, white worms, about 5 millimeters long. These worms live in the lower part of the intestines, rectum, and around the anus, and cause severe itching around the anus because they lay their eggs in the skin around that area. It is worth noting The eggs of this type of worm can live for up to two weeks outside the human body, such as on clothes, bedding, and other places. It is good to mention that this type of worm may cause discomfort to the child, but it does not cause him illness. Herbal treatment for intestinal worms, there are herbal treatment methods to remove intestinal worm disease from the body. Thanks to these methods, individuals can get rid of the disease in a natural and healthy way. Herbal treatment methods are as follows; 1:-Turmeric Turmeric plant, which contains vitamin, can be used to expel intestinal worms from the body. 2:-Thyme: It is a type of plant that

cleanses the body and rids it of intestinal worms. If you drink thyme juice 3 times a day, it makes the urinary tract healthy and ensures that intestinal worms are expelled from the body.

3:-Chamomile tea: It is an herb that helps remove intestinal worms from the body quickly. It is recommended to drink a cup or two during the day. 4:-Green tea: It is a type of drink that provides continuous urination and helps eliminate dangerous bacteria in the body. 5:-Ginger: It is one of the herbal foods that protect the body from dangerous stimulants. You can eat dried ginger by mixing it with a bowl of yogurt. 6- Pineapple: If you suffer from itchy throat and stomach pain, eating one or two slices of pineapple during the day is the perfect solution to get rid of intestinal worms. The most important conclusions we have drawn from studying intestinal worms in children:- .1:- We conclude that there is a high incidence among children more than it is in adults. 2:- Females are more susceptible to infection than males because it targets the vaginal area 3:- Serious diseases for children 4:- The most age groups for infection are children aged 4-9 years. This indicates that age is an influential factor in infection 5:- Infectious diseases transmitted through food and dirt 6:- These diseases must be treated quickly because they affect children in that the physical structure cannot bear the crisis, The most important recommendations we recommend to reduce intestinal worms:- 1:- To raise awareness and health education for all members of society about the risks of infection and how to prevent it through various, 2:- Visual and audio media as well as mass organizations, 3:- Focus on personal hygiene and healthy disposal of waste and provide potable and sterile water, 4:- To take care of preserving food and washing it well with sterilizers before eating. 5:- Sanitary disposal and proper treatment of waste. 6:- Applying precautions for isolating the infected person and his personal tools and taking care of getting rid of the patient's secretions (urine, feces, blood) and following up and studying the condition of direct contacts. 7:- Care for sterilization in health institutions, especially surgical tools, laboratories, and blood donation sites and the method of preserving and transporting it to the sick person.

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