Giardiasis

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Signs and Symptoms:

Giardiasis is an intestinal illness caused by a microscopic parasite called *Giardia lamblia*. In some parts of the world, especially in developing countries, giardiasis is an endemic disease (a disease that is generally found in people who live in a particular region). In these cases, over two thirds of infected persons may have no signs or symptoms of illness, even though the parasite is living in their intestines. When the parasite does cause symptoms, the illness usually begins with severe bouts of watery diarrhea, without blood or mucus. Because giardiasis affects the body's ability to absorb fats from the diet, the diarrhea seen in giardiasis contains unabsorbed fats - so it floats and is very foul-smelling and shiny. Other symptoms include: abdominal cramps, especially in the area above the navel; a distended abdomen (abnormally large belly); large amounts of intestinal gas; loss of appetite; nausea and vomiting; and sometimes a low-grade fever. These symptoms may last for 5 to 7 days, or longer. If symptoms last longer, a child may lose a significant amount of weight and begin to show signs of poor nutrition.

Sometimes, after acute symptoms of giardiasis pass, the disease begins a chronic phase. Symptoms of chronic giardiasis include: bouts of intestinal gas; abdominal pain in the area above the navel; and poorly formed, "mushy" bowel movements.

Description:

Giardiasis is an intestinal infection caused by a microscopic parasite called *Giardia lamblia*. The parasite attaches itself to the lining of the small intestines in humans, where it sabotages the body's absorption of fats and carbohydrates from digested foods.

In the United States, *Giardia* is the most common cause of diarrhea due to contaminated water. It can survive routine concentrations of chlorine used to purify community water supplies, and it can live for more than two months in cold water. It takes as few as ten of the microscopic parasites in a glass of water to begin a severe case of giardiasis in a human being.

It is estimated that between 1% and 20% of the U.S. population has giardiasis, but in developing countries this figure may be 20% or higher. Young children are three times more likely to have giardiasis than adults; this statistic leads some experts to believe that our bodies gradually develop some form of immunity to the parasite as we grow older. It is not unusual, however, for an entire family to have giardiasis, with some of the family having diarrhea, some just crampy abdominal pains, and some with few or no symptoms.

Prevention:

You can <u>prevent</u> giardiasis by drinking only from water supplies that have been approved by local health authorities. When you go camping or hiking, bring your own water instead of drinking from sources like mountain streams. "Touch tanks" in aquariums are also a potential source of giardiasis for children. Wash raw fruits and vegetables well before you eat them. Wash your own hands well before you cook food for yourself or for your family. Encourage your children to wash their hands after every trip to the bathroom, if they handle anything in an aquarium "touch tank," and especially before they eat.

If someone in your family has giardiasis, wash your hands often as you care for him or her. It is questionable (at least, to our way of thinking) whether infants and toddlers still in diapers should be sharing public pools. Certainly they should not if they are having loose stools.

Incubation:

The incubation period for giardiasis is 1 to 3 weeks after exposure to the parasite.

Duration:

In most cases, treatment with 5 to 7 days of antiparasitic medication will help children recover within a week's time. Medication also shortens the time that children are contagious.

Contagiousness:

People and animals (mainly dogs and beavers) who have giardiasis can pass the parasite in their stool. The stool can then contaminate public water supplies, community swimming pools, and "natural" water sources like mountain streams. Uncooked foods that have been rinsed in contaminated water may also spread the infection. In day-care centers and care facilities for the mentally handicapped, giardiasis can easily pass from person to person. At home, an infected family dog with diarrhea may pass the parasite to human family members who take care of the sick animal

Home Treatment:

If your child has giardiasis and your doctor has prescribed medication, be sure to give all doses on schedule for as long as your doctor directs. This will help your child recover faster and will kill parasites that might infect others in your family. Encourage all family members to wash their hands frequently, especially after using the bathroom and before eating.

A child who has diarrhea from giardiasis may lose too much fluid in the stool and suffer from dehydration. Make sure the child drinks plenty of fluids - but no caffeinated beverages, because they make the body lose water faster.

Ask your doctor before you give your child any non-prescription drugs for cramps or diarrhea, since these medicines may mask your child's symptoms and interfere with treatment.

Professional Treatment:

Doctors confirm the diagnosis of giardiasis by finding *Giardia* parasites in samples of an infected person's stool. Stool samples are sent to the laboratory for examination. Several samples may be needed before the parasites are found. A test called an ELISA test on stool can facilitate the diagnosis quickly and is very accurate. Less often, doctors make the diagnosis by looking at the lining of the small intestine with an instrument called an endoscope and taking samples from inside the intestine to be sent to a laboratory. This is done in more extreme cases, when a definite cause for the diarrhea has not been found. Giardiasis is treated with prescription medicines that kill the parasites. Treatment typically takes 5 to 7 days, and the medicine is usually given as a liquid suspension that your child can drink. Some of these medicines may have side effects, so your doctor will tell you what to watch for.

When to Call Your Child's Doctor:

Call your doctor whenever your child has large amounts of diarrhea, especially if the child also has a fever and/or abdominal pain. Also call your doctor if your child has occasional small bouts of diarrhea that continue for several days, especially if appetite is poor, and the child is either gradually losing weight or not gaining as much as expected.