



CRYPTOSPORIDIOSIS

WHAT IS CRYPTOSPORIDIOSIS?

Cryptosporidiosis (crypto) is an infection caused by the parasite *Cryptosporidium*. A parasite gets its nutrients from another living organism (the host). Your body is the host when you have this infection. Crypto mainly affects the intestines and causes diarrhea.

Crypto is easily spread by contaminated food or water, or direct contact with an infected person or animal. About 15% to 20% of people with AIDS are infected with crypto. Only some of these infections lead to serious disease.

Crypto causes a lot of diarrhea, along with nausea, vomiting, and stomach cramps. In people with healthy immune systems, these symptoms do not last more than about a week. See Fact Sheet 554 for more information on diarrhea.

However, the symptoms of crypto may continue for a long time if the immune system is damaged. This usually happens with CD4 cell counts (see fact sheet 124) below 200. If you have HIV infection, and crypto continues for 4 weeks or more, you have AIDS according to the guidelines of the Centers for Disease Control.

Diarrhea can interfere with the absorption of nutrients. If it continues for a long time, you can develop serious weight loss (wasting, see Fact Sheet 519).

Several diseases cause similar problems. To confirm a diagnosis, doctors usually check your stool (bowel movement) for parasites and their eggs. This is called an "O and P" or "ova and parasites" test.

CAN CRYPTO BE PREVENTED?

There is no medication that prevents crypto.

The best protection is cleanliness. Avoid contact with human or animal wastes. Wash your hands after using the bathroom, gardening, handling dirty laundry or animals, or changing diapers. Crypto can be transmitted through oral-anal sexual activity. Do not swallow water when swimming, since water may be contaminated with human or animal waste containing crypto. Raw oysters may carry crypto.

In some developing countries and in some US cities, the public water supply is contaminated with crypto. Check with your water department. If there is a problem, and your CD4 cell count is below 200, consider the following steps:

- Boil drinking or cooking water for one minute; or
- Drink bottled water; or
- Drink filtered water: Use a home filter labeled "1-micron filter" or "Meets National Science Foundation (NSF) standard number 53 for cyst removal;" or
- Drink distilled water. Bottled water may not be safe if it has not been boiled or filtered correctly.

For more information, see the CDC Prevention Guide at <http://www.cdc.gov/hiv/resources/brochures/crypto.htm>.

HOW IS CRYPTO TREATED?

There is no "cure" for crypto; however, antiretroviral therapy (ART) will decrease or get rid of crypto symptoms.

Nitazoxanide has been approved by the FDA for the treatment of crypto in children and adults. It is used along with ART. Some drugs approved for other uses can be used against

cryptosporidiosis, including paromomycin (Humatin).

We can't get rid of the crypto infection. However, there are ways to control the diarrhea it causes. These include Imodium, Kaopectate, Pepto-Bismol (bismuth subsalicylate), tincture of opium and similar preparations.

If you have diarrhea, it is important to drink plenty of fluids to avoid becoming dehydrated. You may also need to replace lost electrolytes (salts in body fluid.) Some drinks contain electrolytes.

THE BOTTOM LINE

Cryptosporidium is a fairly common parasite. It is found in animals, humans, soil, and water. It can be transmitted easily.

In people with normal immune systems, crypto causes diarrhea and other stomach problems for about a week. In people with less than 200 CD4 cells, the diarrhea may continue.

The best way to prevent infection by crypto is frequent hand washing. Also, avoid contaminated water, or ice made with contaminated water. If your local water supply is contaminated with crypto, use only boiled or filtered water for cooking and drinking.

The best treatment for crypto is antiretroviral therapy (ART). Adding nitazoxanide helps fight crypto. Chronic diarrhea due to crypto should be controlled in order to avoid dehydration, loss of electrolytes, and more serious problems like wasting.

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