Angiostrongylus Cantonensis Infection

WHAT IS ANGIOSTRONGYLUS CANTONENSIS?

It is a parasite, a worm, found in rats. Infected rats pass immature forms of the worm in their feces. Snails and slugs get infected by eating infected rat feces. The young forms of the parasite mature in snails and slugs but do not become adult worms. The life cycle of the parasite comes full circle when rats eat infected snails or slugs and the immature parasites become adult worms.

CAN PEOPLE GET INFECTED WITH THIS PARASITE?

Yes. People can get infected under unusual circumstances. However, even if infected, most people recover fully without treatment.

HOW CAN PEOPLE GET INFECTED?

- People can get infected by eating raw or undercooked snails or slugs that are infected with the parasite. In some cultures, snails are commonly eaten.
- Children have gotten infected by swallowing snails “on a dare.”
- People can get infected accidentally by eating raw produce that contains a small snail or slug or part of one. We do not know if the slime left by infected snails and slugs can infect people, such as when the slime gets on produce that is eaten.
- Other ways of getting infected might include eating raw or undercooked freshwater prawns, crabs, or frogs.

CAN AN INFECTED PERSON INFECT OTHER PEOPLE?

No.

CAN PEOPLE GET INFECTED BY HANDLING INFECTED RATS OR RAT FECES?

No. The immature forms of the parasite passed in rat feces cannot infect people.

CAN PEOPLE GET INFECTED BY HANDLING INFECTED SNAILS OR SLUGS - OR ONLY BY EATING THEM?

We do not know if the slime left by snails and slugs can infect people. For example, if the slime gets onto hands and into the mouth or nose.

CAN GIANT AFRICAN LAND SNAILS BE INFECTED WITH THIS PARASITE?

Yes. This type of snail, which can grow larger than a person's hand, is just one of many types that can be infected. But snails can be infected only if they have eaten infected rat feces. We do not know if any of the giant African land snails in the continental United States are infected. These snails pose a major threat to agriculture because they multiple quickly and have ravenous appetites for plants and produce. It is illegal to own these snails without a special government permit. For more information about these snails, go to the United States Department of Agriculture's Web site: http://www.aphis.usda.gov/lpa/issues/gals/gals.html.

WHAT ARE THE SYMPTOMS OF INFECTION WITH THIS PARASITE?

- Some infected people do not have any symptoms -- or have only mild symptoms that do not last very long.
- Sometimes the infection causes a rare type of meningitis (eosinophilic meningitis).
- The symptoms can include headache, stiff neck, tingling or painful feelings in the skin, low-grade fever, nausea, and vomiting.

WHAT SHOULD I DO IF I THINK I MIGHT HAVE THIS INFECTION?

See your caregiver.

HOW WILL MY CAREGIVER KNOW IF I HAVE THIS INFECTION?

Your caregiver will ask you about any symptoms, exposures to snails and slugs, and foreign travel you've had. You might be given routine blood tests, special blood tests to look for an immune response to the parasite, and tests for meningitis.

DOES THE INFECTION NEED TO BE TREATED?

- Usually not. The parasite dies over time, even without treatment. Even people who develop eosinophilic meningitis usually do not need antibiotics.
- Sometimes the symptoms of the infection last for several weeks or months, while the body's immune system responds to the dying parasites.
- The most common types of treatment are for the symptoms of the infection (such as pain medication for headache) rather than for the infection itself.
- Patients with severe cases of meningitis may benefit from some other types of treatment.

IN WHAT PARTS OF THE WORLD DOES THIS INFECTION OCCUR?

Most of the known cases of infection in people have occurred in Southeast Asia and the Pacific Islands. Some cases have occurred in other areas, such as in the Caribbean.

HAVE CASES OCCURRED IN THE CONTINENTAL UNITED STATES?

Yes. In 1993, a boy got infected by swallowing a raw snail “on a dare.” The type of snail he swallowed is not known. He became ill a few weeks later, with muscle aches, headache, stiff neck, a slight fever, and vomiting. Although he had eosinophilic meningitis, his symptoms went away in about 2 weeks, without treatment of the infection.

HOW CAN I KEEP FROM GETTING INFECTED WITH THIS PARASITE?

- Do not eat raw or undercooked snails or slugs.
- If you handle snails or slugs, wear gloves and wash your hands.
- Always remember to thoroughly wash fresh produce.

Information courtesy of the CDC, Division of Parasitic Diseases.

Document Released: 03/09/2005 Document Re-Released: 10/14/2008
ExitCare® Patient Information ©2011 ExitCare, LLC.