Louisiana Office of Public Health Infectious Disease Epidemiology Section Phone: 1-800-256-2748

www.infectiousdisease.dhh.louisiana.gov

Information On Eosinophilic Meningitis

What is eosinophilic meningitis?

Eosinophilic meningitis is a special form of meningitis diagnosed by the examination of the spinal fluid (taken from a spinal tap).

How do I become infected with eosinophilic meningitis?

Eosinophilic meningitis may occur as a complication of many diseases, but ii also may occur from getting a parasite from raw snails, slugs, crawfish and frogs.

The adult parasite is the rat lung worm. Its larvae develop primarily inside snails and slugs. Sometimes they can also be found in crawfish and frogs.

To get infected a person has to eat <u>raw</u> snails, slugs, crawfish or frogs. Cooking will destroy these larvae and prevent them from infecting people.

What are the symptoms of eosinophilic meningitis?

The disease is similar to any other meningitis

Common symptoms of meningitis in anyone over the age of two years are high fever, headache, stiff neck. Other symptoms include nausea, vomiting, discomfort looking into bright lights, confusion and sleepiness.

These symptoms can develop over several hours, or they may take one to two days.

It is usually a mild disease and people recover in a few days. Complications do occur, but are rare.

How come people develop meningitis from this rat lung worm disease?

If people eat raw larvae, they enter the body and go to mature around the brain in the same way they would in a rat. But the human body being different, the larvae cannot continue their life cycle in humans and die there. The dead larvae cause a reaction. The "eosinophilic" white blood cells are the main cells found around the brain tissue and they gave the name to this disease.

Cases are extremely rare in Louisiana

There are very rare cases in Louisiana. Rat lung worms have been found in Louisiana since 1987. The only two cases reported in Louisiana were from a boy who had eaten a raw snail on a dare and from another boy who had eaten raw frog legs.

Since snails, crawfish and frogs are always cooked, the disease is extremely rare.

How can I protect myself from eosinophilic meningitis?

- Cook snails, frogs and crawfish
- If you eat raw vegetables from a local garden, make sure to wash the vegetables thoroughly. A common source of exposure in tropical countries where this disease is common is eating raw lettuce which contains tiny slugs that carry the larvae.
- These larvae are not found in marine animals as fish, oysters and clams so these can be eaten raw.

For more information:

http://new.dhh.louisiana.gov/assets/oph/Center-PHCH/Center-CH/infectious-epi/EpiManual/MeningitisEosinophilicManual.pdf

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