

Lymphocystis Disease

Lymphocystis disease is not an attractive condition, but it's also not fatal.

By Stephen M. Meyer

Q. When I completed my 1,700 gallon pond about six years ago I stocked it with a dozen — presumably sacrificial — goldfish from K-Mart. They cost 22 cents apiece. Thus, my investment was small in the event that chlorine and chloramine were not adequately dissipated.

Well, the goldfish did just fine. In fact, they bred and bred until they numbered close to 100! Giveaways and a frog invasion reduced their number, and I now have added three koi. All are kept in the backyard pond year round. But now I come to the point.

Three of the goldfish have developed cysts that have grown over a period of months. I hope the enclosed photos may aid in identification. Can you tell me anything about the cause, prevention or treatment?

A. The pictures were very helpful. The cauliflower-like cysts erupting through the surface of their skin is the classic sign of Lymphocystis disease. This disease is caused by a virus that infects connective tissues throughout the body. The disease progresses slowly and is usually not fatal. It is very unsightly, however, and ruins the appearance of ornamental fish.

The virus can be transmitted from fish to fish. Ruptured cells shed the virus into the water. Breaks and openings in a fish's outer skin and slime layer provide entry. About a month lag occurs between initial infection and first signs of the tell-tale cauliflower growth.

There is some evidence that infection is much more likely among fish that stay near the bottom of aquariums and backyard ponds. This is because the infected cells shed by host fish are heavy and drift downward. Goldfish, being bottom scavengers (as are koi), are therefore likely to encounter the virus in a closed system.

There is no treatment, and you must assume all the fish the backyard pond are infected. You can limit the impact of the disease by 1) removing all fish with lymphocystic growths and 2) significantly reducing the fish population in the backyard pond.

Alternatively, you can sacrifice all the animals in the backyard pond. Drain it and disinfect with chlorine, refill and let the pond sit fishless for several months. When you go to add new fish you should quarantine them for a month in a holding aquarium with water temperatures above 70 degrees Fahrenheit. You should see some signs of the disease within two weeks. Nevertheless, wait the full month. There is no doubt that the infecting virus entered your backyard pond when you added new fish.