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SALMON POISONING IN DOGS

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Few diseases I see have such an interesting story to their cause as Salmon Poisoning Disease. The name is a misnomer as there is no toxin. The disease is caused by a bacteria-like agent called a rickettsia. But the rickettsia lives in a fluke which is a worm like parasite. The fluke lives in a snail, a fish and finally a dog, raccoon, or other host.

So here is how it goes. A raccoon passes the fluke egg into the environment near water. The fluke egg hatches and is picked up by a snail. In the snail, the fluke harbors the rickettsia. At some point, the fluke exits the snail, produces a mucous strand and drifts downstream. The mucous strand adheres to a passing fish and the fluke enters the fish and encysts in the muscle of the fish. The fish dies or is caught and the dog eats the fish and cyst of the fluke. The fluke invades the lining of the dog intestine and releases the rickettsia which infects the intestinal cells and lymph nodes. The rickettsia then causes the disease in the dog. The fluke is really an innocent bystander and causes little or no disease itself, but eggs are formed and the fluke reenters the environment.

Salmon Poisoning Disease is up to 90% fatal to dogs if untreated. Clinical signs usually begin 4 to 7 days after ingestion of infected raw fish but can be delayed for up to 4 weeks. Signs usually start with lethargy and loss of appetite. A very high fever develops and vomiting begins. Shortly after that, diarrhea begins and is often bloody. Dehydration, weight loss and electrolyte abnormalities are usually what result in death. The disease is difficult to distinguish from parvovirus without running tests.

With treatment of supportive care and antibiotics, most will recover. The only way to prevent the disease is to avoid ingestion of infected raw fish. As fall

approaches, and trout, steelhead and salmon migrate up the local streams, make sure your dog does not sneak off and find a smelly rotting fish to feast on. Never feed your dog raw fish from our local streams. I am not sure how this story of Salmon Poisoning Disease was unraveled, but have to believe Parasitologists and Infectious Disease Specialists lead interesting careers.