

## Heartworms Continue to Plague Pets

It's been more than 150 years since a scientist discovered the heartworm parasite of dogs and more than 80 years since the parasite was found in cats. We now know that coyote foxes and ferrets can be affected. Each year hundreds of thousands of dogs and cats are diagnosed with this dreaded worm and it is estimated that North American cases are actually in the millions. In all this time, why have we not found a way to combat and stop this plague?

Spread by mosquitoes, the heartworm parasite can grow close to two feet long and takes up physical space in the heart's chambers and pulmonary artery. This means that the pet's heart must work harder to push the same amount of blood out to the body. Early signs of this disease include fatigue and exercise intolerance, but later signs can include coughing, fluid accumulation in the lungs or abdomen and death.

For cats, the heartworm larvae prefer the lungs and can cause vomiting, asthma-like symptoms and even sudden death in some cases.

Not only is the pet harmed, but the owner is affected as well. Treatment of a pet for adult heartworm can cost well over \$1000 to \$3000 depending on the size of the pet and the degree of damage to the lungs and heart. The treatment used is an arsenic compound that can have harmful side effects. Sudden unexpected loss of a pet due to the parasite or the adulticide is traumatic for the family.

For a period of time in 2011 the one drug used as a heartworm adulticide was not being manufactured and veterinarians did not have access to the one drug available to treat positive heartworm cases. So even if one had the means there was not any treatment available to kill the adults. Thankfully the medicine is available again.

Sadly, the case might be worse for cats as the blood tests to detect the heartworm parasite are not highly accurate. There is no approved adulticide treatment for heartworm in our feline friends. Many veterinarians and owners do not think to treat their cats with monthly heartworm preventative in spite of there being both oral and topical monthly medications available. I was at a Tufts University Cummings School of Veterinary medicine cardiology continuing education seminar in New England in June of 2012 when a boarded cardiologist asked all 100 veterinarians in the room if they regularly placed cats on heartworm prevention. Only about 30% of the room raised their hands. And this was a self-selected group that was interested in cardiology!

Usually the reason given for not using preventative is that the pet is an indoor pet. However we all know that we see mosquitoes in our homes all summer and fall and even early in the spring. In a study performed in North Carolina 28 % of the cats diagnosed with heartworm were inside only cats. (www.Knowheartworm.com) In New England the percentage of heartworm positive cats is likely much lower but not zero.

Veterinarians have an answer to the heartworm problem. Safe, effective heartworm prevention medications exist in a variety of easy to use applications. What's even more incredible is that the cost of a lifetime of preventive for most pets is significantly less than a single treatment for the disease. So, why do pets continue to suffer and die from a preventable problem?

When all the facts are reviewed, the simplest reason for our failure to control this deadly parasite is simply that we don't give the preventive medicine as we should. Whether it's forgetfulness or financial concerns, pet owners must realize that they are on the front lines in this battle and their actions could have dire consequences for the pet.

Thankfully, as pet owners, you do have powerful allies in this war. Your veterinarian can help you pick the best heartworm medication for your pet and your lifestyle. Oral formulations, like Heartgard and Sentinel, topical products, like Revolution, can help keep you on the winning side.

Beyond your veterinarian, veterinary pharmaceutical companies are also helping. Websites, such as http://us.merial.com, heartwormsociety.org and email alerts are available to help you remember to give the preventive on time.

Don't waste time looking for "natural" or organic ways to prevent heartworms; they simply don't exist. Follow recommendations given by your veterinarian and the American Heartworm Society (www.heartwormsociety.org). It's the best way to keep your pet and your wallet safe!

Dr. Elizabeth Bradt