



Hollywood Insider

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Heartworm Disease

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You may be wondering if heartworms are what they sound like...and the answer is YES. Heartworms are actual worms that live in the heart – ewww! We definitely do not like these nasty parasites, and we are sure you won't either, after reading this article!

Heartworms (*Dirofilaria immitis*) are actual worms that can grow up to 14 inches long! In the adult stage, they live in the pulmonary arteries of the heart in an infected dog. Heartworms get their nutrients from the blood that flows through the pulmonary arteries to the lungs. When these arteries are clogged with heartworms, the heart has to work extra hard to pump blood to the lungs. When there is a heavy load of heartworms (more than 25), the worms begin to back up into the right ventricle of the heart. When there are more than 50 worms, the right atrium of the heart begins to fill. By this time, the heart is severely overloaded and the heart is able to pump very little blood. Sadly, most dogs do not survive past this point.

Dogs acquire heartworms through mosquito bites. That's right – those pesky little bugs that we already detest are also the culprits of heartworm disease. When an infected mosquito bites a healthy dog, it injects microfilaria into the dog's skin. Microfilariae are baby heartworms (larval stage). The microfilariae live in the skin for a few months while they mature into a juvenile stage. Once mature enough, they enter the circulatory system of the dog and then migrate to the heart and pulmonary arteries where

they begin to mate and grow into long worms. This whole process takes about 5-7 months. Adult female heartworms then begin to reproduce and more microfilaria are made, which swim around in the dog's bloodstream until a mosquito comes and takes a blood meal (and a microfilaria) and then goes and bites another dog. The entire process begins again, and on and on it goes!

Testing

We can perform a simple blood test right here in the clinic to check for heartworms. Our test checks for an antigen that is produced by an adult female heartworm. If the test is negative, this means there are no female heartworms, which also means that no microfilaria will be produced, and no new heartworms will grow in the heart. However, a dog could still have male heartworms with a negative heartworm test. But without a female to breed with, the males will just age and die within 1-5 years.

Treatment

Contrary to common belief, heartworm positive dogs *can* be treated. The treatment consists of an antibiotic called Doxycycline which kills a bacteria that help heartworms survive, heartworm prevention (usually Proheart) which prevents new heartworms, and three injections of Immiticide, which kills the adult heartworms. We keep dogs on heartworm prevention throughout treatment, to kill microfilaria and prevent new

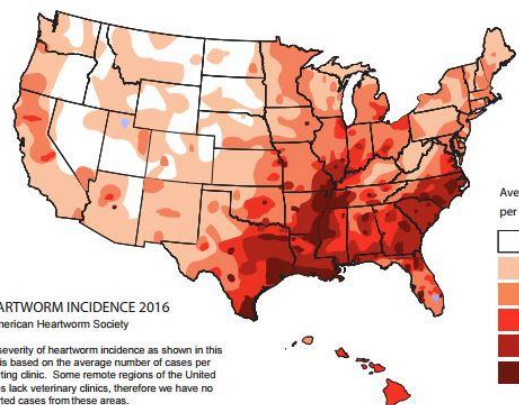
adult worms from forming. Treatment is lengthy and can be pricey, based on the weight of the dog. Therefore, we highly recommend prevention! You can provide years of heartworm prevention for your dog for the same cost of what one heartworm treatment would cost!

Prevention

Prevention is very affordable and easy! Our #1 recommended preventive is Proheart6, the injectable 6 month prevention. Proheart6 does not prevent fleas, however. If you are looking for an all-in-one product, Trifexis is a great option. Trifexis is a once monthly tablet that prevents heartworms, fleas, and intestinal parasites. We also carry a topical product called Advantage Multi, which is also once monthly and prevents heartworms, fleas, and intestinal parasites. All of these require a recent exam and a current heartworm test. Call our office for pricing or to learn more!

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HEARTWORM INCIDENCE 2016
© American Heartworm Society

The severity of heartworm incidence as shown in this map is based on the average number of cases per reporting clinic. Some remote regions of the United States lack veterinary clinics, therefore we have no reported cases from these areas.

Rabies Virus

Rabies Virus is not nearly as common as it used to be. In fact, due to the federal and state laws requiring Rabies vaccination in pets every 1-3 years, the Rabies Virus has been almost eradicated in domesticated animals. However, we still see cases pop up here and there, so vaccination is still required by law. Here in Louisiana, and in Lincoln Parish, Rabies vaccination is required once every 3 years, after the initial vaccination and 1 year booster. This law varies by parish, and by state, so do your research if you plan to move out of this area.

Rabies made a big mark on society in the 1950s with the release of "Old Yeller" and again in the 1980s with the Stephen King film "Cujo." Rabies is a very scary and very serious viral disease that attacks the nervous system. Wild animals can be carriers of Rabies, and some can even be "silent carriers" meaning they can spread the disease without exhibiting signs of the disease. The most common carriers of Rabies virus are bats, skunks, and raccoons.

There is no treatment for Rabies in pets, which is why prevention (vaccination) is so important. Rabies virus infection affects the nervous tissue (brain and associated organs). This occurs in three phases: Prodromal, Excitatory, and then Paralytic Stage.

Basically, the virus will cause the animal's behavior to change from friendly to timid, then aggressive. The animal may suffer from hallucinations, attacking things that are not there. Then, muscle weakness sets in and the animal will stumble and appear "drunk." They will also drool excessively, or foam at the mouth. Eventually, the virus takes over the nervous system and the animal will die. During the last stage in which the animal drools and stumbles around is when human exposure is the most common, as we like to be good Samaritans and stop to help a sick dog on the side of the road. However, if you see an animal acting in this fashion, you should steer clear and call either Animal Control or the Sheriff's Department.

There is a strict protocol in place for suspected Rabies cases, set forth by the Department of Health and Human Services. Each situation is unique, but if you have an animal that has been bitten by a wild animal, you should contact your veterinarian for advice. If you or another person is bitten by a wild animal or an animal suspected to have Rabies, you should contact the health department for human advice.

Veterinarians definitely do not take Rabies Virus lightly! Here in Lincoln Parish, the Rabies vaccination is only required once every three years, following the initial vaccine and 1 year booster vaccine. It is a very inexpensive vaccine, so please keep your pets up to date! We cannot stress this enough! The last thing we want is for pet owners to begin to feel comfortable about not vaccinating, and then see Rabies cases begin to show up in our area. Let's prevent that by keeping all of our pets up to date!

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Let's Go For A Walk!

Spring time is just about perfect for getting outdoors and enjoying the fresh air and sunshine (when it isn't raining). Your pets probably enjoy being outside as well. Studies have shown that pets who are exposed to different environments are happier. Going outdoors, or to the park, helps to engage the senses and stimulate their minds.

Taking your dog for a walk can make a world of difference for your pet. As mentioned above, your dog will be happier. Even timid dogs, once exposed to something new, will learn to enjoy walks and even look forward to them. You can also bond with your dog on these walks. It teaches your dog to listen to you as his owner and to listen to you, as well as get used to being on a leash. Dogs who are never walked on a leash tend to be

harder to control when going other places, such as a trip to the vet.

Walking your dog is also great exercise for your pet and for you! Some dogs enjoy jogging with their owners, while others prefer to just walk. Some seem to be able to walk all day without tiring, and others get tired quickly. However, walking two or three times a week with your dog will make a noticeable difference in your pet, especially if he or she needs to lose a few pounds.

As it gets hotter outside, you may want to stay closer to home, or walk somewhere with a known water source, such as a park. Also, watch your dog and learn when it is time to take a break. You do not want your dog to become overheated or overworked while you are still a mile away from

home, with no shade to rest under. It might be a good idea to carry a water bottle and a collapsible water bowl, especially if you are walking at a different location than where you live, or if you plan to go a longer distance.

There are plenty of dog-friendly places around the Ruston area, although most require pets to be kept on a leash. Lincoln Parish Park, LA Tech campus and Hideaway Park, and Cook Park in Ruston are a few good places to go. It is also courteous to carry poop bags with you, because nobody likes to come across that while walking through the park!

Let's get out there and go for a walk!



Walking through Hideaway Park

Ask the Vet!

Q: *What should I do if my dog gets stung by a wasp over the weekend, when you are not open?*

A: Oh no! Insect bites and stings are no fun. To try and decrease reactions associated with these injuries, we recommend administering Diphenhydramine (Benadryl) by mouth. The dose is around 1mg/pound. So a 50 pound dog would get 50mg of Benadryl, or 2 of the 25mg adult tablets. If a patient is in between weights, it is safe to round up to the nearest half tablet. For our tiny patients, we recommend the liquid children's Benadryl at the same dosage of 1mg/pound. You can repeat this dose up to every 8 hours, but if swelling persists at the site where the patient was stung for more than 1 or 2 days, we recommend bringing them in for an exam.

If there is swelling or bumps anywhere other than where the patient got stung, or if there is any vomiting, we strongly recommend going to an emergency clinic as this could be a sign of a more serious allergic reaction.

~Dr. Kristi Laffitte

Siri Foster, Urinary SO Success Story!

Siri is a 6 year old, medium-sized mixed breed dog. At the end of February, Siri presented for excessive licking around her vulva, and tucking her tail. Her owner was concerned that he had not completely rinsed the shampoo off of her during her last bath, and maybe it had irritated her.

Dr. Mounts performed a urinalysis which we sent to IDEXX, our outside laboratory. We performed the urinalysis via ultrasound-guided cystocentesis. During ultrasound-guided cystocentesis, the doctor uses the ultrasound to locate the bladder. While viewing the bladder on the ultrasound screen, the doctor uses a sterile syringe with a long needle to collect urine straight from the bladder! This is the most sterile way to collect urine. This way, you can be sure that if any bacteria are seen, it is not because of possible environmental contamination. This also allows the doctor to view the bladder and any abnormalities within the bladder and bladder wall. Dr. Mounts noted severe thickening of the bladder

wall (which indicates inflammation) with a large amount of gravity-dependent hyperechoic debris with a distal shadow (this could be a large amount of crystals or a collection of small stones in the bladder). Debris seemed to be very fine with small 2mm diameter circular debris at the top of the debris field. Dr. Mounts then performed an abdominal radiograph to evaluate for the presence of stones in the bladder. No discreet stone noted on radiographs.

Turns out, Siri had a severe urinary tract infection plus struvite crystals in the urine. We also had IDEXX perform a gram stain, which told us which type of bacteria was causing the infection, so that we could treat Siri with the correct type of antibiotics. Siri continued with antibiotics for 2 weeks and anti-inflammatories for 1 week, to provide some relief.

Because of the struvite crystals seen on the urinalysis, Dr. Mounts also changed Siri's diet to Royal Canin

Urinary SO. The "SO" in the name stands for Struvite and Oxalate, two types of crystals that are more commonly found in dogs. The purpose of this diet is to dissolve these crystals and prevent them from forming a bladder stone.

Siri returned after her medications were finished for a recheck urinalysis. The result was amazing! Not only was her UTI gone, but she had NO struvite crystals either! Dr. Mounts performed a recheck ultrasound of the bladder, which revealed that the severe collection of debris had dissipated. The diet definitely worked well for Siri!

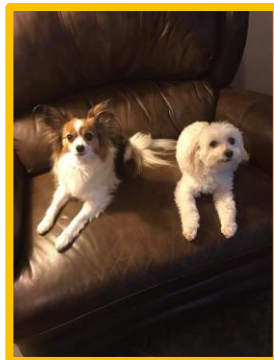
We have several patients on Urinary SO, and we recommend this diet any time crystals are seen on a urinalysis or if we perform a Cystotomy (bladder stone surgery). And this is why!! Siri is a wonderful example of Urinary SO success!



Photo Showcase!



Bailey Gray Mays



Lexie and Lacie Parker



Charm Allen

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At PetStar, our primary focus is to provide you with the most advanced and compassionate veterinary care. Our dedicated veterinary team members cater to your pet's needs in a new, state-of-the-art facility. We have three staff veterinarians supported by a team of well-trained and caring assistants and administrative staff. PetStar offers a unique combination of general veterinary care and boarding, as well as advanced procedures in small animal medicine, surgery and dentistry.

The PetStar Newsletter is dedicated to each of our friends that we have lost along the way. It has been a pleasant journey, and you will always be a part of the PetStar family. You will remain forever in our hearts.

Coming Next Month...

- Why are Vaccines Important?
- Feline FIV and Leukemia
- Flea Prevention
- Meet the Saluki!



Meet the Bengal Cat!

The Bengal is an interesting breed. It is a cross between the Asian Leopard cat and the American Shorthair. The mix created an exotic-looking cat with a domesticated temperament. They are beautiful cats, indeed!

Bengals are full of personality. They demand attention and crave human interaction. They tend to be aggressive toward other cats, and therefore need to be socialized at an early age. Bengals are very agile and active, and are constantly at play. Spoil

them with plenty of toys and maybe let them play outside to keep them busy and engaged.



Photo courtesy of ePet Health

These cats are highly intelligent and outgoing. If they do not have

anything to occupy their attention, they can be mischievous and can get into trouble.

Is this breed right for you?

Breed Characteristics:

Life expectancy: 12-16 yrs
Weight: 9-15 lbs
Colors: tabby spotted, marble and snow