



## Because You Asked...

*By Candy Lewis, D.V.M.*

There are many diseases that greyhounds may be exposed to, both before adoption and afterwards. It is impossible for any greyhound adoption group to test for all of them. A few diseases have recently been in the "greyhound spotlight," but these are neither more common, nor more important, than some of the less talked-about problems. However, due to the requests of some of the adopters and placement representatives, here is a discussion of some of those which are of special interest.

The first thing that needs to be understood is the nature of the tests. Most of these "diseases" are not tested for directly, that is to say that the test does not record whether the organism causing the problem is present in the dog's body or not. Rather, these are *antibody titer tests*, which record whether there has been exposure to the organism and whether the body has mounted a response (created *antibodies*). Antibodies are the protective molecules created by the body to fight a specific organism. The measure of the amount of antibodies to a certain organism present in the body is called the *titer*. Some organisms cause only a short response in the body, so that a positive titer usually indicates that the dog has recently been exposed to that organism and probably, in fact, still has the disease it causes. Soon after the organism is gone, the number of antibodies present (the titer) goes down rapidly. Other titers may remain high long after the dog has recovered from the organism and successfully fought it off. In fact, the reason that we can vaccinate both people and pets is that antibody titers to specific organisms can remain high, even long after exposure. I have a titer to rabies virus, thanks to a vaccine. Most of you will have a titer to measles, for instance, due to childhood vaccine, and tetanus titer is a very good thing, should you encounter the tetanus organism. Just because I test "positive" for rabies or you test "positive" for measles, does not mean either of us is sick!

The variable length of time a titer can remain high after exposure to an organism can cause difficulty in trying to diagnose many diseases. Take, for instance, Lyme disease, a tick-borne disease that is very important in both dogs and humans. Positive titers are common in both dogs and people who do not have Lyme disease. Therefore, the diagnosis is usually made by checking two titers, several weeks apart. A rising titer indicates a current infection (more and more antibody being produced by the body as it tries to fight the organism). A falling or steady titer indicates that the individual does not have Lyme disease. **This complicated pattern is the reason that a diagnosis of any disease needs to be made by a knowledgeable veterinarian (or M.D., for humans), not by the interpretation of a lab test by a lay-person.**

On to specifics: first Fungi – There are at least six important fungal diseases that can affect dogs. Different fungi are more common in different areas of the United States, but, because greyhounds can travel all over the U.S. before they reach their adoptive homes, a veterinarian who suspects a greyhound has a fungal disease will probably run an entire fungal screen, not just pick out the local suspect fungus and test for that alone. If your dog tests positive, your veterinarian will discuss treatment, prognosis, and the need for retesting, all of which will depend on the particular fungus involved and your dog's symptoms.

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Next, let's talk about infections caused by organisms transmitted by ticks. The tick-borne diseases have gotten a lot of publicity lately. The most important tick-borne disease, Lyme disease, has gotten relatively little press, possibly because there is no "scare value" in promoting testing for Lyme disease. Fortunately, ticks carrying Lyme disease are uncommon in southern California, but remember that greyhounds travel great distances during their racing careers. Any "tick panel" done at a reputable lab will include Lyme disease. Rocky Mountain Spotted Fever is another tick problem, less common than Lyme, but also included in a standard "tick panel" at a veterinary laboratory.

*Ehrlichia canis* is also a tick-borne disease and included in a "tick panel." This organism was first recognized during the Vietnam War, so it is not a new problem. Advances in testing have made it easier to diagnose when the signs are more subtle than those seen in the first cases. The nice thing about *Ehrlichia* is that the titer usually goes down relatively rapidly (within a few weeks to a few [4-6] months) after treating, thus making diagnosis of a current infection easier. Occasionally a dog will require more than two to three weeks of treatment for this disease, but in most cases it is easy to cure.

*Babesia* is another tick-borne parasite that is receiving much publicity. Like *Ehrlichia*, *Babesia* is a blood cell parasite that has been around for years – it was mentioned in a veterinary journal article written in 1932 – and that can be tested for through any veterinary lab. Recently, a drug was approved to treat this parasite, although the drug may have some serious side effects in certain dogs. However, some dogs that have a positive titer to *Babesia* will have decreasing titers every time they are tested, indicating that some dogs may be able to clear the parasite from their bloodstreams with no treatment at all!

One thing that is very important to remember is to use your own intelligence when interpreting anything that you read, whether on paper or via the Internet. These tick-borne diseases do not cause cancer or epilepsy or broken bones. Someone has published a list of symptoms to look for to "see" if your dog has one of these diseases. It reads like a list of all symptoms possible in the dog, which is obviously ridiculous. Talk to your veterinarian. He or she will probably be glad to run a series of tests on your dog if you really want to "be sure," but don't allow yourself to be terrified by scare tactics. Your veterinarian is likely to use a veterinary laboratory, staffed and run by veterinarians who are specially trained to interpret laboratory test results, in case your vet has any questions. There is no need to use a "special" lab, nor should the results be interpreted by anyone other than a veterinarian. Greyhounds, because of the way they are kept during their racing careers, may have had more chances to become infected by tick-borne, fungal, or other diseases, but these are all dog problems, not greyhound problems. The majority of greyhounds, like the majority of dogs, are not infected with *any* of the organisms. Enjoy your dog. Be happy!

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