Diagnosing Heartworm Disease In Ferrets

How veterinarians diagnose heartworm disease in ferrets.

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How veterinarians diagnose heartworm disease in ferrets is a very difficult question and depends a lot on your individual ferret. In dogs, we have several simple tests which are extremely accurate in diagnosing heartworm disease. We are not so lucky when it comes to ferrets. Often, it takes what is called a collection of a “minimum data base” plus some additional testing, as well as luck, to be able to definitively diagnose a ferret with heartworm disease.

The Steps For Diagnosis
First, every ferret that is not feeling well needs to have a complete and thorough physical examination done by a ferret-knowledgeable veterinarian. The veterinarian will be looking for changes in the lung sounds, respiration rates or quality, heart sounds (both rhythm and blood flow sounds), chest compressibility, signs of fluid accumulation in the chest or abdomen, and the size of such organs as the liver.

Next, in many instances, veterinarians recommend blood screening for a complete blood count (CBC), chemistry screening and a urinalysis. These tests are not looking so much for the presence of heartworm disease, but for other look-alike diseases that might be present. No one wants to miss a condition like liver disease or insulinoma while chasing a diagnosis of heartworm disease.

Specific testing for heartworm disease is often included in this blood work. Although these tests are very useful in dogs, they are often falsely negative in the ferret, which means that the test is negative even when the ferret has heartworm disease. This happens because ferrets get very sick with only a few heartworms, where dogs often have 10 to 60 heartworms before showing signs. The tests simply are not sensitive enough to diagnose the ferret. Additionally, many heartworms in ferrets do not reproduce – for example, an infection with a single male heartworm won’t lead to any heartworm babies – so the tests designed to look for young heartworms is likewise often useless. If we do get a positive test, however, it is usually meaningful. So veterinarians generally run them, realizing that they only help us if they show positive, and mean nothing if they show negative.

Next on the work up to diagnose heartworm disease is special imaging. Most veterinarians will do radiographs (X-rays) looking for fluid in the body cavities, heart size, changes in the vessels visible around the heart, and changes in the lung fields. Again, this gives very good general information about what is going on inside the ferret as a whole. Most sensitive, and the hardest test to perform, is the ultrasound. Very few veterinarians are skilled enough in the art of ferret ultrasonography, especially when the heart and vessels are involved. Key questions to ask your ultrasonographer is how many ferrets he or she sounds every week, and how many of these are for heart disease. Ultrasonography is a learned art, and not just a black and white test. There is interpretation and personal experience involved. It is critical that a very experienced person ultrasound something as small as a ferret – whether the heart, adrenals or pancreas.

Dr. Mitchell owns Animal Medical Associates in Saco, Maine. She shares her home with 14 ferrets, 11 cats, two birds, a dog and a good-natured husband.