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Addison's disease - Help Your Vet to Not Overlook It

by Carol Lang
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The following article is being published in hopes that other breeders who have experienced this will come forward and give us information that could save the lives of other Addisonian dogs. This past fall, my five-year-old brood bitch died of Addison's disease after having gone through a very stressful period. In May, she whelped her third litter of seven puppies after a normal pregnancy and the puppies were healthy. I did detect that the bitch showed signs of jealousy which she never had with the other litters, and would often sulk when we played with the puppies. We kept one of the bitch puppies from this litter and she often played with her although occasionally again we detected the jealousy. I guess that I should have seen the painting on the wall, as this bitch is rather quiet and laid back, but this was the first time we had kept any of her puppies and she has always been a bit jealous of new dogs in the house until she found out she was loved just as much and then she would give up on this moodiness trait.

She and her daughter seemed to hold a special bond together and the whole thing just kind of passed out of my mind for the time. In September, we went on an extended vacation and all the dogs were going to stay at home with our daughter except the new puppy because she was only eleven weeks old, and we felt she needed to be with us to continue her socializing which our daughter wouldn't have time to give her. We were gone for over two weeks and during the last several days I came down with a sinus infection that put me in bed for a week after we arrived home. Since I hadn't done much with the dogs for that week other than feed and exercise, about the only thing I noticed about the bitch was that she looked thinner, seemed depressed and didn't want to eat unless hand-fed her treats. As soon as I felt better my plan was to bathe all the dogs as they had gotten quite muddy with all the rain while we were gone.

As I lifted the bitch into the tub, I was horrified to feel her ribs and how much weight she had lost (12 lbs) in the four weeks since we had left on vacation and arrived home and when I bathed her. I called my vet to make an appointment the following Saturday for a routine checkup because I was really getting concerned about her. That week other symptoms started to appear: she totally refused to eat, she was very depressed, lethargic, having a problem with her bowel movements (appeared to cause pain and she would lean to one side), signs of weakness in movement. She vomited only once and never had diarrhea which frequently is noted during the crisis stress periods of Addisonian dogs. As these symptoms appeared, she was rushed to the vet.

Let me tell you that one of the hallmark symptoms of Addison's disease is impaired tolerance of stress. Since this is normally a gradual destruction of the adrenal gland, many symptoms go undetected before an acute crisis unless you have closely recorded these symptoms over a period of time. At this point I should tell you this is not my first experience with a dog diagnosed with Addison's disease, although the first time one that lived in my household had the symptoms. Five years before, two bitch puppies sired by different parents died within six months of each other from Addison's out of my bloodlines: I also have several friends with Beardies that also have been diagnosed with this disease. As soon as we took the bitch to the vet, I gave her my suspicions that It



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might be Addison's. so we treated her that way and then started the bloodwork for a definite diagnosis as well as x-rays. She died before the diagnosis was confirmed...it was Addison's disease.

Why am I admitting to this publicly, you ask? Because at the present time I know of 12 Beardies in the Midwest with clinically diagnosed Addison's disease. No, they aren't all out of my bloodlines, some are out of the top kennels in the US and Canada. At this present time six of them are dead because the diagnosis came too late. If we can alert people to the symptoms of this disease perhaps we can save them the heartbreak that some of us have already gone through. Also, since we have seen a high incidence of this, perhaps we can gain enough knowledge to wipe this out before it becomes a breed problem.

If you want more information on this please contact me and I will send you copies of the articles used in the following article written by my veterinarian, Dr. Debra Nickelson, DVM. Anyone that would like to contribute to the research we are doing. please contact me. Carol Lang, 806 Lincoln Avenue, Albert Lea, MN 56007.

Addison's disease. By Dr. Debra Nickelson, DVM

When you show or play with your dogs and they respond so well, you really enjoy each other. Unfortunately, some dogs have a disease that does not allow them to respond normally to exercise and stress. It may be so severe as to endanger their lives. Let me tell you about Addison's disease.

Just above and to the middle of your dogs' kidneys are two small but very important pieces of tissue called adrenal glands. These glands are partly controlled by the tiny pituitary gland in the brain and are composed of two parts. The inner part, the adrenal medulla, is not essential for life, but the outer part, the adrenal cortex, is vital for many body functions. The adrenal cortex makes over 50 different chemicals, of which are two important groups. Glucocorticoids help control the metabolism of foods (carbohydrates, protein and fat) and also produce an energy surge during stress or exercise. Mineralcorticoids affect the body cells' water and electrolyte balance.

Some dogs have lost the normal function of these glands and are afflicted with hypoadrenocorticism. In 1885, Sir Thomas Addison recognized this disease in people and it was termed "Addison's." This disease occurs when at least 90% of the adrenal cortex is destroyed. Usually gland destruction is a gradual process and signs occur during "stress." Stress includes everything from surgery, trauma and infections to changes like boarding at a kennel or going to a show. Eventually hormone secretion becomes inadequate even under the most stable conditions.

Why do dogs develop Addison's? The primary cause is not known. but here may be a concurrent autoimmune process. In this case, certain body cells do not recognize the adrenal cortex as being part of the body. Some autoimmune diseases are hereditary, so Addison's may also be partly hereditary. I have seen some family instances occur in Bearded Collies. Other causes of Addison's are surgical removal of the adrenal glands, a fungus infection or cancer invading the glands. Excessive bleeding or blood clots in the glands damage them. If a dog is treated with steroids long-term or treated for hyperadrenocorticism (Cushing's), the adrenal gland may not be adequately stimulated to function.



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Most instances of Addison's occur in female dogs younger than six years old, but it is a difficult disease to detect. Why? A dog with Addison's has a vague history of signs that come and go. The most common sign is waxing and waning brief episodes of weakness and depression. This of course hints at many other problems. Other signs are decreased appetite, shaking or shivering, diarrhea, and vomiting. As the disease progresses, dogs lose weight, have abdominal pain, drink more water, urinate more often, and are less tolerant to exercise. Even with these signs, your veterinarian needs some laboratory data. A complete blood count and measurement of certain electrolytes are necessary when Addison's is suspected. An electrocardiogram (EKG) and radiographs (x-rays) can help determine how the disease has affected the heart. An ACTH stimulation test pinpoints a certain diagnosis. This test measures how well the adrenal cortex responds to a chemical that is similar to the natural pituitary hormone.

What can be done for a dog with Addison's disease? In an acute life-threatening crisis, the dog is treated first and tested later. Treatment may involve two-four days of hospitalization while your veterinarian increases the dog's fluid volume, corrects electrolyte imbalances, provides glucocorticoids and mineralcorticoids, monitors urine production and reverses heart arrhythmia. After a dog comes home, he or she will need diet supplements and special medication.

A dog with Addison's can live a normal life given special care. Since Bearded Collies may have higher instances of this disease, be sure to discuss this possibility with your veterinarian when your dog is ill. Then you and your dogs can really enjoy each other.