

## **Library Article**

# Addison's Update: A Personal Perspective

## By: Karen Miller- Stebbings Beardie Bulletin, November 1996

(From Elsa Sell: I have known Karen since beginning work on the autoimmune endocrine health survey last fall. She had been a great supporter of our health survey and a very helpful resource for articles about Addison's and treatment. Her personal perspective in this article are important ones. It is timely since out survey is ongoing. The subclinical condition, lack of definitive tests for subclinical Addisonian dogs, the role of stress (i.e., catalysts or triggers), value of autopsy, and undefined hereditary pattern are germane. If you have any questions related to Addison's, please contact Linda Aronson or myself).

Recently, Bev Rafferty, editor of Seafarer faxed me an article on Addison's disease that I had submitted some months ago. The article is based on notes from a lecture given at a Southern Counties Bearded Collie Club Seminar in England. It provides an excellent technical discussion of the disease, clinical signs, laboratory findings, and a description of mineralocorticoid (Fluorinef) therapy. As I say, it is an excellent technical discussion, and if you would like a copy, please let me know because it is not the writing that follows. Instead, I decided to try to convey my personal perspective on how we, as breeders and owners, need to approach Addison's disease and the Addisonian dog.

First and foremost, DON'T FOOL YOURSELF. Addison's is an hereditary disease and it can turn up in any of our pedigrees. No breeding program from USA foundations stock, or Portuguese Water Dog foundation stock, is safe from the specter of Addison's disease. None of our breeding programs are sufficiently independent so that we are immune. It may be dormant in your breeding program at this time, waiting for the outcrops that just might produce the disease. We do not yet know HOW it is transmitted form generation to generation, but you'd better believe that IT IS TRANSMITTED GENETICALLY. At this time, we think it has to be produced from both sides of the pedigree, which would encompass a major autosomal recessive, but we don't have proof of that. Research is proceeding, but until we have answers and tests we can work with, understanding Addison's as we know it right now, is incumbent on every individual breeder. That's what this article is about - things we can know and do in the absence of better information.

You May Have an Addisonian Dog and Not Know It. The autoimmune destruction of the adrenal glands is called Addison's disease. In the past, we have called dogs who have ALMOST NO ADRENAL FUNCTION "Addisonian." We know they have the disease because they are visibly very sick. But, the truth is, BEFORE they become visibly (clinically) ill, they have diminished adrenal function. So, in practical terms, we have two kinds of Addisonian dogs:

- "Clinical" Addisonians are dogs who are VISIBLY ILL and need therapy to survive. These dogs have lost more than 80% of adrenal function.
- "Subclinical" Addisonians are dogs who are NOT VISIBLY ILL, and who in fact APPEAR NORMAL. These dogs have enough adrenal function to go about their daily lives without being sick, BUT they may have lost 50% of adrenal function, AND WE DON'T KNOW IT.



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#### **Understand the Current Reality of Testing for Addison's**

Addison's disease is diagnosed by a blood test call the ACTH stimulation test. Any vet can administer the test. The problem is that the test is not a very sensitive measure. IT WILL ONLY IDENTIFY A "CLINICAL" ADDISONIAN. Despite several attempts, we do not yet have a test for "subclinical" Addison's disease. So you cannot take a dog with no symptoms to your vet and have it "checked" for Addison's. To recap, the reality is that a dog may be Addisonian, and we don't know it because, with 50% of adrenal function, a dog may look and behave perfectly normally, and the ACTH test will not recognize the dog as Addisonian. The ACTH stimulation test will only recognize an Addisonian when approximately 80% of adrenal function is destroyed.

### Stress is a Catalyst in Destroying the Adrenal Glands

A "subclinical" Addisonian who appears normal can become a "clinical" Addisonian because of stress. Many different factors can stress a dog. Here are some examples:

- When my Portuguese Water Dog, Chuchu Miller, became ill, we were at a dog show. What I didn't realize was that dog shows stressed him terribly. That stress probably caused him to become "clinically" Addisonian.
- Owners have reported boarding "normal" dogs, and coming home from vacation to find a clinical Addisonian. Why? Because boarding stressed the dog.
- We have had reports of Lyme's disease (not genetic) being the cause of clinical Addison's. Lyme's, or any other debilitating disease, is most likely to be the CATALYST, NOT THE CAUSE that brings the Addisonian condition to the clinical state.
- Two bitches become clinically Addisonian after the physical and hormonal stress of whelping puppies. Normal hormonal changes are stressful to the body, which may be why we see more female than male Addisonians.
- There is only one Addisonian that I know of who became clinical because of chemicals. She was misdiagnosed with Cushing's disease (which is the opposite of Addison's, and not a problem in our breed), was treated for it, and as a result of the drug therapy used became clinically Addisonian.

### Be Observant, Not Hysterical

The clinical onset of Addison disease happens as early as eighteen months or an late as seven years. The average age is somewhere around three or four years. But long before clinical onset, I'm sure there are signs that a dog is "not quite right." In retrospect, that was true of Chuchu Miller. Compared with other puppies, he was a finicky eater, he vomited and had diarrhea more frequently. His energy level waxed and waned more than other dogs. When he was two, I kept taking him to the vet. They thought I was just an overindulgent owner, because nothing could be found wrong. Obviously, his adrenals were not functioning, but we had no way of knowing that.

### **Define and Re-Define "Correct " Temperament**



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Be aware of temperament as a telltale sign that something isn't quite right. The nervous, shy, or skittish Portuguese Water Dog may not be a good breeding prospect beyond the simple consideration of good temperament. The dog that doesn't show well, or gets tired easily, or stresses at the vet or on show weekends would be suspect.

#### **Breed Only the Soundest Dog**

After type, I look for a truly healthy dog with a truly healthy immune system. Talk to your vet about healthy immune systems, and read the available literature. There are also many holistic approaches to a healthy immune system. Read about them and judge for yourself. Check out your dog completely before you breed. Most of us will test for brucellosis and present the usual stats: OFA, ERG, CERF, and GM-1. But that's not enough. Consult your vet. Have a full blood panel done, including a thyroid test. If anything is off, DON'T BREED! IF you have a dog that has Lyme's disease, or any other illness, or a dog who is "depressed," vomits, or is ill frequently; or even one that gets extremely nervous in new situation, DON'T BREED!

### Autopsy Whenever You Can

Examining the adrenal glands will provide you, as a breeder, with irrefutable information as to whether that dogmas Addisonian. So, difficult though it may be on the death of a beloved dog, please consider having an autopsy done, and reporting the condition of the adrenal glands. Check with your vet NOW to determine his/her comfort with extracting and examining the adrenal glands. These are tiny, and not easy to find. If you need procedural support, call me.

Remember that an autopsy will not tell you if the dog was a genetic CARRIER of Addison's disease (we don't yet have a method of confirming that status), but it will tell you if it was an Addisonian.

Please know that we are working diligently to solve the puzzles of Addison's disease.

- We are doing extensive pedigree research to establish a mode of inheritance for the disease, which will lead breeders to better understand Addison's in their own pedigrees.
- We are at the very beginning of DNA analyses to further our cause.
- We know we need an early detection system, a blood assay that would allow us to identify "subclinical" Addison's. This year our research in that area has not proved fruitful, but we will not stop trying.

Please report your Addisonians either to me, to the PWDCA Health Registry, or both. I have ever yet had an owner who would not at least let me inform the breeder..[Reprinted by permission, this article originally appeared in Seafarer (Portuguese Water Dogs) magazine. Ms. Miller Stebbings has been associated with PWDs as a fancier, owner, exhibitor, and breeder since 1980. She has been actively involved with Addison's research for over 12 years, and currently chairs the PWDCA Addison's Committee.