N E W S L E T T E R

Mission Statement

Fundraising for the purpose of supporting genetic and other health research to benefit canines, in particular the Cardigan Welsh Corgi.

Cardigan Welsh Corgi Health Foundation, Inc.

A Quarterly Newsletter **Issue N° 1 — Summer 2013**

Meet the Officers

Kathy Carlson of Wyntr Cardigans - Vice President

As the founder of Wyntr Cardigans, I have been involved in the breed since 1989 and in dogs for over 35 years including over 25 years experience in all-breed grooming. Health has always been an important issue to me as both a pet owner and breeder.

I became involved in founding the CWCHF because I felt that it would complement current all-breed health organizations and provide a collected place for Cardigan breeders and owners to locate resources for breed specific health tests, health information and current research on issues affecting Cardigans.

WHAT IT'S ALL ABOUT

The author is breeder/exhibitor Nancy Willoughby, Rubad Cardigans. one of the founding members of CWCHF, Inc.

In our first newsletter of the Cardigan Welsh Corgi Health Foundation, you will read about Maggie, a real life, flesh and blood Cardigan Corgi with a real owner who had hopes, aspirations and plans for her. Cathy added Maggie to her family as a potential therapy dog, a job that Maggie was amazingly good at. Over time, Maggie's increasingly fearful behaviors eventually prevented her from participating in the therapy visits that she and Cathy loved so much. I have a particular interest in the story of Cathy and Maggie – I am Maggie's breeder. I hope that the breeders among you (and if you have bred or intend to breed ONE litter of dogs, then you are a dog breeder) will remember Maggie when they make decisions to bring dogs into the world. I hope that the puppy buyers among you will insist that breeders think of you when they plan litters.

Picture courtesy Ruth Mulvaney

It's only a dog

What is the problem? Why worry about health, temperament or whatever? After all, it's only a dog… Until recently, most breeders were worried about diseases like distemper that had no cure and took out about half of all dogs, puppies and adults. Veterinarians did not have the diagnostic abilities or the tools to fight other things that afflicted dogs, such as cancer and autoimmune diseases. If a dog was sick, and it was serious, the dog was put to sleep, end of story. Now, we have veterinarians with many tools available to them and the ability to try to save dogs from all kinds of horrible afflictions that were beyond hope in the past. And we have new genetic tests that give us the ability to avoid bringing dogs into the world with some of the most heartbreaking scourges

Members of the family

One could argue that sometimes people are prompted to spend far too much money in the futile effort to save their pet from the inevitable. And there may be some truth to that in some cases. But the fact is that dogs are no longer chained in the back yard or living in the barn. They live in our homes and even our beds as members of the family. For many of us, dogs are easier to relate to than our fellow humans, and the bonds that we form with our dogs are deep and strong. We love our dogs, plain and simple.

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What It's All About

(From page 1)

In the 1960s, people had been told about "responsible" "show" breeders and that AKC dogs are a superior "product". We came to expect that these dogs would be healthier and generally better than dogs produced in other ways, or mixed breed dogs. Many people have been disappointed with the dogs they have acquired from purebred dog breeders. The reasons are many and complex. The dog is a family member, but also a commodity. Ever spiraling prices lure people to dog breeding who are looking to make a living. Some breeders care about improving the breed from the standpoint of show ring type. They want to win at shows, and this requires them to concentrate on external features of the dogs, such as fluffy coats, color, and elements of structure that matter to dog show judges. Even breeders who care about breeding for health and good temperaments are working with faulty gene pools and an atmosphere that leads people to hide what they have found in their breeding programs. I imagine that some people are afraid that they will not be able to sell their puppies, or that no one will breed to their stud dogs. Whatever the motivation, many breeders simply do not focus much attention on health and temperament. Breeders who care about health issues may become discouraged and leave breeding altogether when they find that they are responsible for bringing puppies into the world with undesirable genetic issues, that come at them seemingly out of nowhere. So, who is then left to give us our cherished companions?

The solution?

I propose a solution to the problem. That breeders work together. That they take advantage of the genotype and phenotype health testing that is available. That they are open and honest about what they see in their own breeding program and share information. What does this all mean?

Genetic testing – if we take advantage of genetic tests that are available to us, then we will be able to work on eliminating genetic disease from our purebred gene pools. Not all health issues lend themselves to genetic testing, but the tests that we have should be used correctly and carefully. Genetic tests by their nature tell us which dogs are affected, which are carriers and which clear. If we find that our gene pool has many affected dogs, we may not be able to eliminate that disease for many generations. But, by breeding affected to carriers, we make more carriers, carriers and affected to clear, we make more dogs that can never display that disease and that bring us closer to eliminating that gene altogether. However, there is not just one important health issue in any breed. This includes the Cardigan, which historically has had few affected individuals relative to other breeds. We need to proceed with caution when using genetic test results. If there is a more pressing issue that has an earlier onset, we need to respect that that issue takes priority. In other words, we need to respect other's choices, but breed responsibly and intelligently. Fellow breeders need NOT make a responsible choice into a "witch hunt". And we don't need to eliminate any dog from the gene pool that has a disease that can be tested for. We can use that dog wisely. There is no need to "cull" him.

Phenotype testing – such as for hip and elbow dysplasia – when available should be used and the results should be weighed in our breeding programs. Not as cut and dried as genetic testing, but still useful, we can make progress by using dogs carefully that we find are affected with any disease, or if serious enough, that dog can be eliminated from our breeding programs. But again, the total dog must be weighed and breeder's choices should be respected. If I see X breeder has tested a dog for Y disease because he or she has results that appear in an open database, we really should not be throwing stones at that person because he/she breeds that dog or allows it to be bred. Without openness and the feeling that our choices will be respected, we cannot make progress toward reducing the numbers of dogs affected with any disease. Conversely, if we breed that dog, we should have good reasons for doing so. If we feel the need to hide results, then perhaps we should do some soul searching about whether the choice we have made is ethical or not.

Knowledge is power

Open health databases – what a world it would be for the breeder if everyone could and would put results of their health testing, or even knowledge that they have about disease that cannot be tested for, into an open health database? We could steer our breeding programs more effectively, and help to reduce the incidence of serious disease that we have no test for.

When I breed, I think about Maggie, who is affected with Addison's disease. I have a dream – that one day diseases like Addison's will be reported and archived by breeders, breeders who care enough to keep up with their puppy buyers and know what diseases appear. I dream of an openness between us as breeders that allows us to work together to help our puppy buyers have that healthy pet that they expect AND our own beautiful show hopefuls. Won't you join me in this dream?

PRA Revisted

Recently a friend went to the CWCCA PRA database to add her newest girl and found many untested dogs in her pedigree so she decided to test her dog for submission. This is the responsible thing to do, don't you think? How often do you test your breeding stock? Here's what Optigen has to say about it. (http://www.optigen.com/opt11_faq.taf#faq4)

Why does OptiGen NOT certify pups classified as Normal by Parentage?

Theoretically, it would be correct to expect all descendants from a normal x normal mating to be normal for that exact genetic disease. This is true if both parents in EVERY mating are known to be genetically normal either by genetic testing or by "normal by parentage". However, in order to confidently rely on this approach, you need to consider the requirements and risks:

1. You must start out testing all of your breeding stock and any new breeding stock brought into your kennel. You must not rely on anyone's "word" that a dog is normal.

2. You must confirm parentage relationships for every descendant on an ongoing basis through parentage analysis. There is a very real rate of mistakenly identified parents, typically sires. We must stress to you that cases of faulty parentage happen to the very best of breeders. Accidents happen. Double matings happen. You can rely on "normal by parentage" only if you document actual parentage. Some breed clubs and registering organizations consider ongoing risk of non-parentage high enough to justify acceptance of only one generation of "normal by parentage."

3. You must accept that there is a very low, but real rate of inaccuracy in parentage testing. Sometimes, more than one male can be considered the potential sire because their DNA is so similar. Sometimes, mistakes are made.

4. Regarding PRA, we believe there is more than one form of inherited PRA in some breeds. While the prcd form of PRA (detected by OptiGen's test) is by far the cause of the majority of PRA cases, a small portion remains unidentified. There's nothing we can offer at present, but you need to be aware that a second type of PRA could show up.

5. The frequency of new mutations causing an inherited disease is extremely rare, but this risk really can't be factored in for practical purposes.

6. And finally, if a human error were made anywhere along the line - samples labeled incorrectly, dogs identified incorrectly, a lab or office error was made, several generations could pass before the error was recognized. Great attention to detail at every step is required.

Our recommendation to concerned breeders is to always test the dogs that will be bred. You can rely more on "normal by parentage" for pets or dogs that won't be bred. If pets or non-breeders are carriers, they won't have the disease. Based on all these reasons, OptiGen does not issue certificates for "normal by parentage."

So, what's your opinion? Please go to our Facebook page and let us know!

Cardigan Welsh Corgi Health Foundation, Inc.

WHAT IS ADDISON'S?

The adrenal glands are essential for life. They are two small glands which sit next to the kidneys. Their size does not correlate with their importance. They secrete a number of hormones essential for normal functioning as well as survival in stressful situations. Addison's Disease (named after it's discoverer in 1855) means there is insufficient production of these hormones. It is also called hypoadrenocorticism. Addison's disease can be primary: atrophy (dying off) of the adrenal gland or secondary: a problem with the pituitary gland which secretes hormones that control growth and activity of the adrenal glands.

Causes of Canine Addison's

Primary: It is believed that most cases of primary Addison's Disease are due to the body's immune system destroying the adrenal tissue. The reasons for this are unknown. Other less common causes include infections, cancer, trauma, drug side effects and various types of inflammation.

Secondary: This is due to problems with the pituitary gland which include inflammation, trauma or tumors.

Physiology

The hormones produce by the adrenals can be grouped as follows:

1. Mineralocorticoids - aldosterone

2. Glucocorticoids - cortisol

3. Primary Sex Hormones - androgens, estrogens

4. Stress Hormones - adrenalin (note: the production of these hormones seems to be unaffected in primary Addison's Disease)

The main groups we are concerned with are the mineralocorticoids and the glucocorticoids.

The areas of the body that these hormones influence area as follows:

- *Mineralocorticoids: control the ability to maintain electrolyte and water balance in the body.*

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Addison's Disease - Maggie's Story

By Cathy Donohue

Maggie, my blue merle Cardigan Welsh Corgi, is one of the true loves of my life. When she first exhibited strange symptoms she was about two years old. She started losing weight for no reason that we could find and her coat became pretty funky looking. After our vet exhausted all of her ideas she sent us to an oncologist because, by that time, she was sure Maggie had some sort of a cancer. I was so incredibly relieved when that doc couldn't find anything.

That is the incident that I look back on now and pinpoint as the beginning of something to do with her Addison's Disease. For the next four years Maggie would bounce back and forth between being absolutely fine and acting like any other Cardigan to what in the world is wrong with her now. Her vet and I became pretty good friends. The running joke was that I was a hypochondriac. We ran test after test without ever finding an answer. At two, Maggie became a licensed and insured Pet Therapy Dog. We worked our way up to working the neurosurgical ICU at University Hospital. She was so good at her job. She would get in bed with the patient and snuggle up and let that person pet and talk to her. I loved it and she loved it. When she put her special cape on she knew what was expected of her. After a year or so I noticed that things were off. She would not be as happy to get in the car and she started shaking at the hospital. I took her to the vet and we tried all sorts of behavioral drugs until I eventually retired from the program. When Maggie was five she started limping. She took the normal anti-inflammatory drugs and rested, as much as you can rest a Cardigan. I spent weeks trying to break her of flying into my lap - one of our favorite things. We finally ended up at an orthopedic vet. They x-rayed her entire body and decided she had mild arthritis in her front legs. So, all of her gait problems were determined to be mild arthritis.

In January of 2010 Maggie developed hemorrhagic gastroenteritis. It was snowing in Cincinnati, and my back yard had blood spots all over. I immediately took her into my vet who put her on several drugs, one of which was Prednisone. Mags got better, but not back to normal. We went to her yearly checkup on a Monday to get her boosters. Her vet did some blood work because, according to her, Maggie looked a little hinkey (and we laughed that we had reached a place where she had to make up terms to describe my Diva). By Friday night of that week Maggie had an Addisonian crash. Thank doG that we decided to take her to the Emergency Hospital that Friday night. One of the vets on duty that night had a dog with Addison's Disease.. When she heard Maggie's story she was immediately suspicious. They ran the full gamut of tests and came back to us about 2 hours later. Maggie's potassium was very high and her sodium was very low. These results were a good indicator of Addison's disease - known as The Great Pretender. They hospitalized her on an IV and ran an ACTH stimulation test the next day - the only true diagnostic test for Addison's. Maggie totally failed to stimulate. That means that her adrenals were at least 90% ablated. After four years of on again off again "sick" dog, we had a diagnosis!

Addison's is very easy to treat. Maggie gets one milligram of Prednisone a day and I give her a shot of Percorten every month. Thanks to an incredible Yahoo ADog support group I have lowered the amounts of drugs that she receives and treat her for less than $40 a month.

Maggie

What is Addison's

(From page 3)

- Glucocorticoids: affect nearly every tissue in the body - promote a sense of well being & stimulate appetite; help control blood glucose levels; help the kidneys control water & calcium levels in the blood, help with control of red & white blood cell numbers.

As you see, without these hormones we have a very sick animal which will not survive long without treatment.

Patient History

Addison's is seen mainly in middle aged female dogs. There seems to be no obvious breed prevalence. The disease usually follows a waxing and waning course and may be confused with other diseases as the clinical signs are very non-specific.

Physical signs

The physical signs tend to relate to the lack of these important hormones. These will include:

- weakness, depression, lethargy
- anorexia, weight loss
- vomiting, diarrhea
- excess drinking or urinating
- slow heart rates
- abdominal pain
- hypothermia

Laboratory Signs

The laboratory signs are more useful in diagnosing Addison's and will help to explain the physical signs, some or many of the following may be seen:

- Increased Lymphocyte (a type of white blood cell) numbers
- Anemia
- Increased serum potassium
- Decreased serum sodium
- Altered sodium/potassium ratio (Na:K): <27
- Increased serum phosphorus
- Increased serum calcium
- Decreased blood glucose
- Increased BUN & Creatinine (indicators of kidney function)
- Acidosis (upset in body's acid/base balance)
- Low blood cortisol levels

X-rays may also be done which may reveal a smaller than normal heart due to the reduction in volume of circulating fluid in the body as part of Addison's disease.

If the pet is not too sick, a test called an ACTH stimulation is performed. As this test takes several hours to complete and sometimes days for results, treatment for Addison's Disease can usually be instituted on other laboratory results.

Treatment

Treatment is normally in two stages:

1. Adrenal Crisis Management
2. Maintenance therapy

Adrenal Crisis Management is required when we have a very sick animal with abnormalities as those listed above. Your vet will decide what the best course of action is to follow according to each individual case. This may involve fluid therapy and drugs to help reverse the changes. Once the animal has recovered to a normal state we can go onto maintenance therapy.

Maintenance Therapy is usually lifelong and involves tablets to replace the hormone that are deficient: i.e., glucocorticoids & mineralocorticoids. Your Vet will decide which medications are best for each case.

Monitoring

Careful monitoring of electrolytes is important throughout he early stages of Addison's disease management. Your Vet is likely to give you a list of dates when further blood tests will be needed. These will usually be quite frequent at first with the intervals between blood tests gradually increasing.

(This article courtesy of www.VetStop.com.au/info/index.aspx)

Links to More Information On Addison's Disease

http://www.whole-dog-journal.com/issues/14_10/features/Diagnosing-Addisons-Disease-in-Dogs_20365-1.html

http://canineaddisonsinfo.com

http://k9addisons.com

Addison Forums

http://k9addisons.com

http://pets.groups.yahoo.com/group/AddisonDogs_/