Cushing’s Disease (part 3 of 3)

http://www.youtube.com/watch?v=WsrJY5VKVBo

Hi, this is Dr. Karen Becker on part 3 of Cushing’s disease. In parts 1 and 2, we discussed that there are two types of Cushing’s disease – typical and atypical.

Typical Cushing’s disease is when the middle layer of the adrenal gland overproduces cortisol. Atypical Cushing’s disease is when the outside and inside layers overproduce other types of hormones. The outside layer of the adrenal gland can overproduce aldosterone, which regulates electrolytes. That translates to electrolyte abnormalities in your pet’s blood work.

More commonly, the inside layer of the adrenal gland overproduces sex hormones: estrogen, progesterone, and testosterone precursors. Although we don’t know why animals develop atypical Cushing’s disease, we do have some ideas that could predispose pets to developing this particular syndrome.

The Ill Effects of Early Spaying, Neutering, and Desexing

In my opinion, early spaying and neutering, early dog and cat desexing absolutely has to participate in part of the upregulation of sex hormone production by the adrenal gland. This is because when we spay/neuter dogs early – before puberty, 6 months or earlier – their endocrine systems, glandular and hormonal systems never have the chance to fully develop.

So when we desex them, we pull out the ovaries and the testicles, and all of their sex hormones are taken out of the body. They literally become asexual. That’s not a problem. However, it becomes a big problem later on in their lives because their bodies still require some natural hormone for normal biologic function.

What’s one remaining source of tissue in a pet’s body that can secrete some sex hormones? You got it – the adrenal glands. The adrenal glands are asked slowly to produce more and more sex hormones for a body that needs them. At some point, they simply can’t keep up, and overproduction of sex hormones from the adrenal glands occurs.

Not all veterinarians will tell you that this is what’s happening, and not all of them believe that atypical Cushing’s disease is something they should be treating. I do treat a lot of atypical Cushing’s in my practice because we see a lot of symptoms pertaining to hormone disregulation. By balancing out your pet’s hormones, you see not just physiologic improvement, but mental and emotional improvement as well.
Atypical Cushing’s disease certainly can be influenced by when and if you desex your pet and how early desexing occurs.

The second factor that can change hormone regulation in your pet’s body are substances called xenoestrogens. Xenoestrogens are chemical substances that mimic the effects of estrogen in your pet’s body. Because hormone disruption is a central focus in Cushing’s disease, substances that facilitate hormone disruption need to be evaluated, including xenoestrogens.

**Xenoestrogens and External Estrogen Sources**

Xenoestrogens are found in fertilizers, pesticides, soils, a lot of non-organic meats, as well as plastics. They potentially include your pet’s plastic drinking bowl.

Pets are exposed to just as many external sources of estrogens as we are. Of course, that can influence their own adrenal glands’ production of estrogens. That can negatively influence your pet’s endocrine balance. So you need to be thinking about potential external sources of estrogen-like compounds that can be causing adrenal stress for your pets if they have been diagnosed with atypical Cushing’s disease.

**Natural Treatments to Manage Atypical Cushing’s Disease**

Dr. Jack Oliver, an endocrinologist at the University of Tennessee Endocrinology Lab, suggests some natural treatments to help reduce the amount of circulating hormones in atypical Cushing’s patients. He recommends considering using melatonin, the first on his list of arsenal of treatments. First, it’s non-toxic. Second, it’s cheap. Third, it’s pretty effective in the early stages of atypical Cushing’s disease.

Dr. Oliver recommends that pets be provided with melatonin because it helps reduce both estrogen and cortisol levels in your pet’s bloodstream. It’s an easy way to provide some management for atypical Cushing’s with no side effects.

Dr. Oliver also recommends – for pets that are dealing with elevated estrogen levels – using high lignin flax hulls, not flax seed oil that doesn’t have enough of the lignins present. High lignin flax hulls are phytoestrogenic, and it seems kind of contraindicative feeding estrogen to a pet that already has estrogen dominance problems.

But believe it or not, there’s a negative feedback. Providing phytoestrogens orally sends a feedback mechanism to the adrenals, telling them to pipe down on the estrogen production. Overall it can be quite therapeutic in helping to manage – not cure – atypical Cushing’s in dog patients.

Integrative veterinarians use a whole host of glandulars, homeopathics, neutraceuticals, and Chinese herbs, as well as adrenal-balancing neutraceuticals, to help manage atypical Cushing’s.
So if you have a pet that’s been diagnosed with atypical Cushing’s disease or could be acquiring this particular syndrome, working with an integrative vet is a pretty good idea.

**Identifying Cushing’s Disease Early**

Most importantly, I want you to remember that disease is never black and white. Your pets are never vibrantly healthy, and then acquire typical or atypical Cushing’s disease a week from Tuesday at 1 in the afternoon. It never happens that way.

The only time your pets are vibrantly healthy and then in a state of disease is when your pets are hit by a Mack truck, and that’s the truth. Other than acute trauma, disease is on a spectrum, and your pets are either headed toward immunologic and endrocrinologic balance or away from balance.

My biggest frustration with traditional veterinary medicine is that we tend to categorize diseases as black and white. This means that when you’re working with a reactive, not a proactive, veterinarian, he or she will probably tell you, “Oh your pet’s fine.”

You’re saying, “I’m just seeing some symptoms. They’re losing their muscle tone and they’re drinking a lot. Their skin color and attitudes are changing. The hair texture’s changing. I just don’t like what I’m seeing.” And the vet’s response is “Oh but it’s fine; these are normal signs of aging.”

As veterinarians, we tend to not address these issues until they’re so clear-cut, that disease has become black or white, because we’ve waited for so long.

My pep talk to you today is, if you believe that your pet is having changes that you suspect are with endocrine involvement, ask your vet to check. The only way to treat these symptoms early is to identify early. And the only way to identify early is to work with a proactive veterinarian and determine if indeed your pet has this syndrome going on.

Probably my biggest frustration is that veterinarians... Oftentimes – through clinical pathology or charting changes in blood work over a period of several years – we tend to see that as thyroid levels drop in dogs, the ALP levels tend to slowly increase.

That’s a pretty clear marker that your pet’s endocrine system could be becoming out of balance. You need to begin working with your veterinarian to identify some of these trends in your pet’s blood work, so you can identify potential shifts in their endocrine system earlier rather than later.

Most diseases are actually in the gray zone. So if you believe that your pet is headed to the gray zone – not vibrantly healthy, but not yet wracked with disease – then that’s the perfect time to
act and identify potential barriers in your pet’s system that could be contributing to moving down the gray spectrum and into the black disease areas.

We recommend that you work with your veterinarian and identify every biochemical change in blood work that could be abnormal, including ALP. Do further diagnostics that we discussed in video two if you have concerns about potential secondary changes in your pet’s adrenal glands.

**Preventing Cushing’s Disease**
Most importantly, I’m going to tell you that you need to the common-sense things in reducing cortisol overproduction in your pets. This means that prevention is what I’m going to recommend to you.

We recommend that your eliminate carbohydrates – corn, wheat, and rice – because carbs prompt insulin release. Insulin release will prompt a cortisol release. We recommend that you consider adrenal-supportive substances. If your pets are undergoing known stress, you can provide great herbs: magnolia, ash Uganda, and phosphatidyl serine. These can help them through periods of stress to decrease cortisol release.

We also recommend that you also think about low-stress diets. In addition to low carb, feed a low stress type of diet – a moisture-rich diet – to your pet. A species-appropriate way to nourish your pet can overall reduce biologic stress immensely over the course of your pet’s lifetime. Moving your pet’s body to give her adequate exercise also results in a lifestyle that can decrease the amount of stress that your pets have on their adrenal glands.