Bio-Identical Replacement Therapy

Atypical Cortisol Estrogen Imbalance Syndrome (Plechners Syndrome)

What is the ACEIS syndrome?

Many animals with current disease, chronic issues and/or behavior problems have underlying hormone imbalances leading to a chronically imbalanced immune system. Typically, their adrenal glands produce too little internal cortisol or defective cortisol resulting in the imbalance.

The body responds to insufficient cortisol by releasing a hormone called ACTH (adrenocorticotrophic hormone). ACTH normally stimulates the production and release of cortisol and estrogen from the adrenal glands. In animals with hormonal imbalance, the area of the adrenal gland that usually produces cortisol is incapable of reacting to the ACTH, so that the levels of cortisol remain low. In contrast, the area of the adrenal responsible for estrogen production remains functional and produces estrogen in response to the ACTH. This leads to elevated estrogen levels in both male and female animals because the body keeps signaling that it needs more cortisol. A high level of estrogen tends to be “pro-inflammatory”, disturbs the immune system and also blocks the action of thyroid hormone.

This complex hormonal imbalance can play a significant role in the genesis of many behavior problems such as thunderstorm phobia, separation anxiety, house soiling and fear-aggression. It can also play a role in many immune-mediated diseases such as allergies, inflammatory bowel disease, otitis, pancreatitis, cancer and asthma. Just about any disease process can be caused by this imbalance.

This endocrine-immune imbalance seriously compromises the ability of animals to protect themselves against disease. Hormones have gone awry and collectively undermine the intelligence, stability and potency of the immune system.

At first the imbalances may cause a minor problem, such as allergic dermatitis, a hot spot, a reaction to a vaccine or a reaction to a fleabite. But as time goes on, the underlying disorder can spawn more serious problems – such as autoimmunity and cancer and even contribute to early death.

Testing

A blood sample is drawn and sent overnight to a lab in Texas. I receive results the following week on Tuesday or Wednesday. The test will give total estrogen values, thyroid values and IgA, IgG and IgM values. A plechner animal will have elevated estrogen, either low or high cortisol (due to ineffective cortisol) and low IgA, IgG and IgM. IgA is found in great abundance in mucous membranes, such as the lining of the respiratory, gastrointestinal and urinary tracts. There these antibodies perform major sentry duty and keep undesirable microorganisms from reaching the deep tissues and organs of the body. If IgA is low – this indicates intestinal inflammation and malabsorption of certain nutrients and large molecule medications. Thus why many animals do not get better with conventional or alternative treatments.

Treatment

Once your pet has been diagnosed with Plechners Syndrome, the goal of treatment is to rebalance his/her hormones. In mild cases, it may be sufficient to use oral supplements for adrenal support only. I always use adrenal supplements to help support the gland either way.

If IgA is below 60 I will start with an injectable form of cortisol because the intestines are inflamed and oral cortisol will not be absorbed sufficiently and therefore ineffective. Once the IgA is above 60 then we will move to an oral form or replacement cortisol that is given daily.

In addition to improving cortisol levels, adjustment of the thyroid hormone is also part of the treatment protocol in most dogs and a few cats.

Generally I will retest the IgA levels in a month after start of treatment. As the IgA becomes more normal the estrogen will decrease to normal levels and disease will improve.

This therapy normally needs to be continued for many years, often the rest of your pets' life. The treatment can be compared to a hypothyroid person on thyroid medication. It is possible though that while being treated the functional health of the adrenal gland will improve and the gland will start producing more cortisol on its own and the oral cortisol replacement will be reduced or stopped altogether.