



YOUR DOG AND THE THYROID GLAND

THE THYROID GLAND

The thyroid gland is a small gland located under the skin at the center of the neck. By appropriately signaling the thyroid gland to produce thyroid hormone, a smaller gland at the base of the brain, called the pituitary gland, helps to control the blood's thyroid hormone levels. The thyroid gland is an intricate part of your dog's endocrine system. It can have an effect on many different phases of your dog's health, from your dog's hair coat all the way to the cell function.

HYPOTHYROIDISM

Hypothyroidism ("hypo" meaning less than normal) is the result of too little circulating thyroid hormone. This is normally caused by the thyroid gland ceasing to function properly. The most common cause is "Idiopathic Hypothyroidism", which means there is no biological reason why the thyroid gland is not working properly. Another cause of hypothyroidism is thyroid inflammation (thyroiditis), which can be familial (runs in related dogs). Hypothyroidism can be debilitating disease if not treated. However, with proper treatment, your dog can live a long and healthy life.

SYMPTOMS

The condition rarely appears in pets under 2 years of age; middle age or older pets are usually affected. The clinical signs of hypothyroidism can be a loss of hair often on the tail, hindquarters or flank that is not a result of scratching. Other indications include dry scaly skin, recurrent skin and/or ear infections, appearance of dark pigment in the skin, dull brittle hair, bleaching of the hair coat and possibly the development of oily skin. Advanced cases of hypothyroidism may cause your dog to become lethargic and overweight, even on a limited diet. The animal may not want to exercise, may seek out warm places and may have cold clammy skin. Breeding dogs may have a lack of libido, prolonged anestrus or shortened estrus. Some pets have been known to experience seizures, tremors or muscle weakness as well. Additionally, a syndrome has been described where dogs may show signs of aggression due to hypothyroidism.

DIAGNOSIS AND TREATMENT

Blood testing is needed to confirm a diagnosis of hypothyroidism. As the total thyroid levels (T4) are often low even in dogs without hypothyroidism, it is often useful to run a thyroid panel, which measures several thyroid hormone parameters in order to confirm the diagnosis. For some dogs with signs associated with hypothyroidism a treatment trial may be done even if the thyroid hormone levels are within normal ranges.

Treatment of hypothyroidism consists of giving an oral thyroid replacement supplement (levothyroxine sodium tablets) on a daily basis. **A total thyroid hormone level is rechecked 3-4 weeks after starting the medication to make sure the proper dose has been chosen** (blood is drawn 4-8 hours after giving the usual morning pill to measure the peak thyroid hormone level). ***It is crucial that your pet receive his/her medication consistently during this period to allow us to accurately interpret the test results.*** Once a dose level has been established, a thyroid hormone level is rechecked every 9-12 months to see if the dose needs to be changed. You should see an improvement in your dog's overall health in approximately two to four weeks. Changes in dogs coat will take anywhere from one to six months, depending on the rate of new hair growth of your dog.