

HYPERTHYROIDISM

Is your cat losing weight despite having a great appetite?

CLINICAL SIGNS OF HYPERTHYROIDISM:

- Increased Hunger
- Weight Loss
- Increased Thirst
- Hair Loss
- Increased Activity
- Increased Vocalization
- Enlarged Thyroid Gland
(can be felt)
- Intermittent
Gastrointestinal Signs
- High Blood Pressure

PROGNOSIS:

If effectively managed, cats may live for many years with a good quality of life.

If left untreated, this disease will cause uncontrolled weight loss, severe heart disease, and eventually death.

Hyperthyroid Disease

Hyperthyroidism is an endocrine disorder where the body produces excessive thyroid hormone from iodine. Thyroid hormone has many jobs. It plays an important role in regulating metabolism, hair growth, body temperature, heart rate, and even the amount of blood flow directed to the kidneys. The pituitary gland produces thyroid stimulating hormone (TSH) which then regulates the thyroid gland's production of thyroid hormone (T4).

Cause of Hyperthyroidism

Hyperthyroidism is caused by a benign growth on the thyroid gland (located in the neck). This causes the gland to over produce thyroid hormone. This growth is in the form of a goiter. Only 3-5% of these growths are of a cancerous nature. It has been proposed that there are multiple underlying factors that influence if a cat will develop hyperthyroid disease later in life. Factors such as genetics, diet, chemicals in the house hold, litter, and many more yet to be identified.



DIAGNOSING

Typically, this is a disease identified later in life (>7 years of age). Thyroid hormone may be measured to determine if a pet has hyperthyroidism. The test results must be considered in conjunction with clinical signs, patient's history and physical exam findings. If the thyroid level is within the reference range but there is still strong clinical suspicion the pet has hyperthyroidism, additional thyroid testing may be done to confirm a diagnosis. This same test is used to monitor the cat's response to treatment.

TREATMENT

Methimazole: Commonly given as a tablet by mouth twice daily. Tablets cannot be broken or crushed. Also available in a transdermal gel that is applied to the ear. This treatment is fairly affordable but requires regular testing.

Diet: Hill's y/d prescription diet is extremely restricted in iodine to prevent the production of thyroid hormone. Must be fed this diet alone. Takes 8-12 weeks to reduce thyroid hormone level. Not recommended for multi-cat households and regular testing is required.

Radioactive Iodine Treatment: If a cat's kidneys are working properly and the cat is not responding to or is unaccepting of medical management radioactive treatment is a good option. Usually a 1-time treatment, only ~ 3% of cats require a second treatment. No anesthesia is required but the cat must be quarantined during treatment. This treatment option cures the disease rather than treating it but can be expensive.

Surgical Removal of Thyroid Gland: This is the least common treatment option as it is more invasive, costly, and more stressful for the cat. A medical nuclear scan must be performed prior to surgery to identify any ectopic thyroid tissue (thyroid tissue in abnormal locations) and identify which gland is affected.

KIDNEYS, HEART, & THYROID

Kidney disease is frequently masked by hyperthyroid disease, becoming apparent as thyroid hormone levels stabilize. It is important to identify any insufficiencies in the kidneys prior to surgical or radioactive treatment. Unchecked elevated thyroid levels also predispose cats to developing heart disease, which in turn can lead to sudden cardiac arrest. For these reasons it is important to identify hyperthyroid disease, initiate treatment, and follow up with regular monitoring.

ADVERSE EFFECTS OF MEDICATION:

*Most side effects are seen within
the first 3 months of treatment*

- Lethargy
- Loss of Appetite
- Vomiting
- Facial Itching (<4%)
- Bone Marrow Changes (<4%)
- Liver Failure (<2%)

*Normal Thyroid Level:
0.8-4.7 ug/dL*

It is possible with treatment to cause hypothyroidism (too low of thyroid hormone). These cats tend to put on weight, be more lethargic, and heat seeking.