



**GRAND AVENUE**  
VETERINARY CLINIC

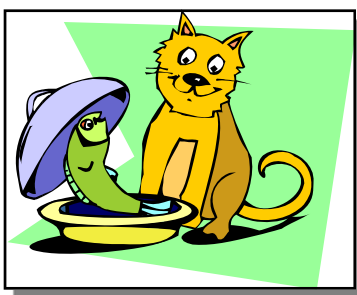
# FELINE HYPERTHYROIDISM

Hyperthyroidism is a common disorder of middle-aged (>8 years) to older cats. The disease results from an overactive thyroid gland. The thyroid gland consists of two lobes located in the neck which produce thyroxine, a hormone which serves to regulate the body's rate of metabolism. The hormone affects many different systems throughout the body. An overproduction of thyroid hormone increases the body's metabolism affecting many organ systems and causing many negative effects on a cat's health.

Typically, hyperthyroidism causes the cat to lose weight as a result of increased calorie usage. The cat will usually try to compensate by increasing its appetite. Some owners may describe their hyperthyroid cat as having a ravenous appetite. Weight loss can be so gradual that some owners may not even realize that it has occurred. Affected cats usually drink a lot of water and urinate excessively. There may be vomiting and diarrhea, and their fur tends to become dull or matted. As the disease progresses the cat's appetite may decline.

The excessive thyroid hormone can have a devastating effect on a cat's

cardiovascular health. Many hyperthyroid cats have severe increases in heart rate and blood pressure. They also may develop a form of heart disease and eventually heart failure. Left untreated,



hyperthyroidism will eventually result terminal cardiac disease.

The diagnosis of hyperthyroidism is most commonly accomplished by measuring the blood level of thyroid hormone (T4). Additional tests which often benefit in the assessment of a cat with this disease include a complete blood count, blood chemistry profile, urinalysis, chest x-rays, electrocardiogram, and echocardiography.

Treatment of this disease is often very successful. There are two common avenues of treatment, any one of which could be the best choice depending on your situation. Many factors come into consideration when choosing the best therapeutic option for a particular cat.

## (1) Radioactive Iodine ( $I^{131}$ ) Therapy

Usually performed at a referral center, this therapy is often the safest and most effective treatment. Currently, two sites in the Twin Cities offer this treatment. The treatment consists of having your cat being given radioactive iodine which selectively irradiates and destroys abnormal thyroid tissue. In most cases the disease is completely eliminated, and no further medication is required. The disadvantage to this mode of treatment is that your cat must remain in an isolation ward until it meets government radiation safety standards. This usually takes anywhere from two to five weeks. Although the cats are well cared for by the specialty staff, many owners find the time apart very difficult. The expense of this therapy (\$2000) often times also will be prohibitive, but it is the most successful and safest treatment.

## (2) Oral Medication

Tapezole (Methimazole) is an oral medication and is usually the first choice for initial therapy in hyperthyroidism until a definitive treatment is decided upon. The drug blocks most of the effects of circulating thyroid hormone. For cats who cannot comply with daily pills a liquid suspension can be formulated; however, it is often less accurate in dosing and must be refilled more often. Some cats will have

complications with Tapezole, most of which will occur in the first three months of medication. Tapezole therapy usually costs \$15-50 per month. While it spreads the cost of therapy out over months, a cat managed with Tapezole will cost about the same as radiation therapy in a matter of just 2-3 years.

Cats on Tapezole must have their T4 levels checked yearly to monitor the degree to which the drug is controlling the disease. Because the overactive gland can wax and wane in its production of thyroxine, careful monitoring is necessary when managing the disease using this technique.

