Callie is an eleven-year-old calico cat cared for by Margo since she was a three-week-old kitten. Over the past eight or nine months Callie developed quite a ravenous appetite. In the last few months, even with her aggressive appetite, she was losing weight. Margo became very concerned especially with Callie's weight loss and brought her in to her veterinarian. After a thorough physical examination and a blood work-up, Callie was diagnosed with feline hyperthyroidism. Several options for treatment were given and Callie was sent home on oral medication to treat Callie's condition. Margo is asking for my opinion on what she should do ultimately to treat Callie's hyperthyroidism.

Feline hyperthyroidism is a subject we have broached previously in this column but it certainly bears further discussion. The thyroid glands in cats are located normally in the neck area and are paired, one on the left side and one on the right. Their primary purpose is the production of thyroid hormone, which is a substance used in many reactions within the body. It is intimately associated with metabolism. Cats, and for that matter dogs and humans, cannot live without this hormone. Hyperthyroidism is too much thyroid hormone being produced by one or both thyroids. In feline hyperthyroidism, this occurs because one or both thyroids have developed into a tumor, which produces too much hormone. Normally, when the body has enough thyroid hormone circulating in the blood, the thyroid glands will take a rest so to speak. They will again begin to produce thyroid hormone, as the body requires. When a tumor develops, it is not responsive to this negative feedback and will continue to produce thyroid hormone in excess. If the tumor is only in one gland, the other gland will shut down its production and eventually greatly decrease in size. The tumor continues to grow.

This chronic over-production of thyroid hormone leads to very deleterious effects on the body, primarily the heart and liver. Left unchecked, it is always a fatal disease. Early on, their caretakers often note that these cats are indeed eating ravenously. This is because their metabolic rates are very high owing to the high level of thyroid hormone in the blood stream overworking the body. Overtime this process begins to literally "burn out" these cats. The heart rate, having been elevated throughout the disease process, begins to fail. The liver becomes diseased, and eventually, as noted previously, death occurs. Before we were able to diagnose this disease, cats would die from this disease without our knowledge as to why.

The great thing about this disease in cats is that it can be totally eliminated! There are two methods for eliminating this disease and one method for treatment. Treatment alone involves the administration of a drug called Tapazole, which effectively blocks the production of thyroid hormone from the diseased gland or glands. It is important to understand that this does not cure the dis-

ease. It will curb the symptoms but the tumor(s) will continue to grow often to the point where more Tapazole will need to be used. Curing this disease requires one of two procedures.

Cats with hyperthyroidism can be treated with iodine 131. This radioactive form of iodine is selectively taken up by the active thyroid tissue, which then in turn destroys the tumor. Before this procedure is done, a special scan using a material called technicium is often done to determine where the thyroid tumor is and how large it appears to be. This method works beautifully and indeed cures the disease. The disadvantages to this process are that the cats must trek to a facility licensed to treat with radioactive materials and the cats must stay in the facility until they are emitting a low enough level of radiation. Since these are usually older cats and somewhat set in their ways; they are not often appreciative of weeklong stays in strange confines.

The other method for cure is surgical removal of the tumor(s). A special ultrasound technique is used to identify the thyroid tumor or tumors and thus guide the surgeon. Caretakers often express concern over their elder kitties having surgery, but this procedure, while meticulous and necessarily quite precise, can cure the disease. These cats do very well. And, since all the cats that have this disease are older, the surgeon is generally experienced in working with the special needs of these patients.
Whichever procedure that is chosen, these cats should be treated with the Tapazole drug for a short coarse beforehand, therefore eliminating the effects of the increased thyroid on the patients lowering their anesthetic risk. My preference is to ultrasonically scan the neck in these cats and to perform surgery primarily because the results are excellent and the cats do not have to “vacation” away from home.