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Vets Working on Feline Hyperthyroidism

Rather than treat all cats that have enlarged thyroids the same, researchers from the Virginia Tech vet college and a Maryland clinic are measuring a cat's hyperthyroidism first before determining a treatment.

Greg Daniel, professor and head of the Department of Small Animal Clinical Sciences, Virginia-Maryland College of Veterinary Medicine and Tina Conway, veterinary internal medicine specialist at VCA Veterinary Referral Associates, hope their research on hyperthyroidism will help cats like Trixie.

About 30 percent of cats treated with the standard "one dose fits all" approach develop hyperthyroidism, said Greg Daniel, DVM, Dipl. ACVR, head of small animal clinical sciences at Virginia-Maryland and one of the researchers in the study. [*I believe they meant to say that 30 percent of the cats treated with the standard radioiodine dose could have been cured with a lower dose and that a few that required a larger dose were not fully cured. RSH*]

"While a fixed dose is effective in eliminating the hyperthyroidism, there is a concern that we are over-treating the cats," Dr. Daniel said.

"By using the fixed dose, we tend to give more radioiodine than needed for a large proportion of cats, yet for a small number of cats that remain hyperthyroid, we are giving less than we should," Daniel added.

Rather than treat all cats that have enlarged thyroids the same, David Panciera, DVM, Dipl. ACVIM, and Wendy Morré, DVM, are conducting a clinical trial by first measuring the severity of each cat's hyperthyroidism. Using scintigraphy, they tailor radioiodine dosages based on an individual's radionuclide uptake rate and size of the thyroid.

Researchers hope to provide objective criteria derived from scintigraphic studies to determine the dose of radioiodine that achieves the best treatment responses.

Virginia-Maryland researchers last year teamed with Tina Conway, DVM, Dipl. ACVIM, of VCA Veterinary Referral Associates in Dipl. ACVIM, of VCA Veterinary Referral Associates in Gaithersburg. Dr. Conway has treated more than 200 hyperthyroid cats with radioiodine.

Conway, who was already using scintigraphy, offered to adjust her methodology so her data could be used in the study.

“We are doing two studies in parallel,” Daniel said. “The veterinary college is looking at a series of radioiodine doses and will compare results with Dr. Conway, who used a different dose range. Eventually we can combine the data so we can look at effectiveness across a broader range.”

The study also is looking at SDMA, a kidney biomarker, which may predict kidney problems in hyperthyroid cats.

“There is an interaction between hyperthyroidism and chronic kidney disease, and often the hyperthyroidism will mask or hide the underlying kidney disease,” Daniel said.

“A veterinarian might be treating a hyperthyroid cat and not realize that the kidneys are not functioning well until the hyperthyroidism has been eliminated,” he said.

The research is being funded by Virginia-Maryland’s Veterinary Memorial Fund. The college’s Collaborative Research Network partners with specialty clinics on cutting-edge work.