



Winter Edition 2013

# vetNEWS



## affordable and effective treatment FOR CATS WITH UPPER RESPIRATORY DISEASE

By Kelly MacKean, DVM, DACVIM

It's the office call so many veterinarians dread: a sneezing cat with nasal discharge. Even worse are the recheck patients who don't respond to conventional therapy. Although the diagnosis of feline upper respiratory tract disease (URTD) is straightforward, the treatment is anything but. Left untreated, these patients can develop secondary bacterial infections, ocular ulcers and destruction of the nasal turbinates. Some patients develop severe stomatitis and gingivitis. Although rarely fatal, these diseases cause significant morbidity in patients and are costly to clients. If a practice includes any shelter work, we know that these cats are difficult to adopt out and can be a drain on scarce medical resources. However, a recent therapeutic trial conducted by Michael Lappin, DVM, PhD, and his team at Colorado State University, funded by Morris Animal Foundation, holds promise in treating these frustrating cases.

Dr. Lappin's research group has been interested in the diagnosis and treatment of feline upper respiratory infections for several years. Previous studies conducted by the group include development of diagnostic tests for URTD pathogens, examination of disease prevalence rates and therapeutic trials with interleukin-2, famciclovir and intranasal vaccines. Based on their research and experience in treating client-owned cats, Dr. Lappin and his team devised a study testing novel therapies in shelter cats with URTD.

Dr. Lappin, along with research teammate Audra Fenimore, DVM, took 26 shelter cats with upper respiratory infections that had failed conventional therapy with lysine, amoxicillin-clavulanate or doxycycline. The cats were selected from various shelters in the Fort Collins, Colorado, area but were transported and housed in Dr. Lappin's research facility for the duration of the study. The cats were divided into two treatment groups,

### EXECUTIVE TEAM

David Haworth, DVM, PhD  
President/CEO

Dan Reed  
Executive Development Officer

John Taylor  
Chief Operating Officer

### VETERINARY OUTREACH & COMMUNICATIONS

Winona L. Burgess, DVM, CPA, MBA  
Director of Scientific Communications & Veterinary Outreach

Thomas Stevens  
Senior Specialist, Veterinary Outreach

Allen Byrne  
Senior Specialist,  
Scientific Communications & Veterinary Outreach

Jean Vore  
Specialist, Scientific Communications



Message from  
Winona Burgess,  
DVM, CPA, MBA  
Director of Scientific  
Communications &  
Veterinary Outreach,  
Morris Animal Foundation

Dear Fellow Veterinarians and Researchers,

We know how busy it can be working in a clinic or lab. So, to help save you time, we designed a new, easy-to-skim format for our newsletters. This new format will help you get the information you need more quickly and easily than ever before.

In addition to the new look, we are excited to announce that Morris Animal Foundation recently approved \$1 million in funding for equine health research. The research areas include Cushing's disease, laminitis, equine metabolic syndrome, stem cell therapies and more. Calls for new research proposals for canine and feline research will begin in December with a deadline of March 2014. So, encourage your fellow veterinary researchers to apply.

We appreciate the veterinary community's continued support of Morris Animal Foundation's animal health research studies. Our investment in veterinary science will help millions of animals live longer, healthier lives.

Dr. Winona Burgess

## adjunct drugs do not improve neurologic function FOR DOGS AFTER SPINAL DISEASE SURGERY

By Christine Carmine, DVM

Herniated intervertebral discs are common in certain breeds of dogs, such as Dachshunds, Shih Tzus and Pekingese. In the most severe cases, where dogs are paralyzed and have no feeling in their limbs, surgery to relieve pressure from the herniated disc offers the best chance of recovery. Veterinarians will sometimes administer high doses of steroids before and after surgery in the hopes that this will improve the outcome. The use of steroids in this capacity has been the topic of some debate, since steroids have serious potential side effects, including gastrointestinal ulcers and bleeding.

Funded by Morris Animal Foundation, researchers from North Carolina State University evaluated two adjunct medical therapies to determine how they would affect the outcomes of dogs that underwent surgery for acute spinal cord injury. The two medical therapies evaluated included a commonly used steroid, methylprednisolone sodium succinate, and a new class of drug called fusogens, specifically polyethylene glycol fusogen. Results indicated that neither therapy improved neurologic function after surgery in dogs with severe spinal cord injury. While it was disappointing that neither drug improved outcomes, this is important information for veterinarians to know when providing postsurgical treatment. n



**Morris Animal  
FOUNDATION**  
Golden Retriever Lifetime Study

Morris Animal Foundation's Golden Retriever Lifetime Study is one of the most exciting studies ever conducted in veterinary medicine. By enrolling 3,000 purebred Golden Retrievers for the complete duration of their lives, the prospective study will become the largest ever conducted and will help benefit the lives of dogs everywhere.

So far, more than 1,100 dogs are in the process of being enrolled in the study. This couldn't have happened without the more than 900 dedicated veterinarians who have helped push this effort forward. For all who are participating in the study, thank you.

If you would like more information on this groundbreaking project, visit [www.MorrisAnimalFoundation.org/Golden](http://www.MorrisAnimalFoundation.org/Golden). We would love to have you on our team—and so would the dogs! ▶

▶ Morris Animal Foundation is currently running a campaign to raise awareness of the Golden Retriever Lifetime Study. We have developed media tools to help veterinarians enrolled in the study advertise their participation. Contact us for more information about how you can take advantage of these tools. Local press is a great way to promote your business and show your commitment to improving the lives of the dogs in your community.

# ask THE EXPERT

By Allen Byrne

Leptospirosis, also known as lepto, is a bacterial disease on the rise in the United States. Morris Animal Foundation recently caught up with Dr. George Moore, a leading expert on leptospirosis and frequent recipient of Morris Animal Foundation funding, to discuss this growing threat to our canine population.

**Morris:** Can you address any trends in the prevalence of leptospirosis in the U.S. dog population?

**Dr. Moore:** Our research involving medical records from university veterinary teaching hospitals indicated that diagnoses of leptospirosis in dogs have been more common in the last decade (2000s) compared to previous decades. Although historically considered a disease more commonly found in middle-sized or large breed dogs, in the 2000s the disease was diagnosed more in dogs weighing less than 15 pounds.

**Morris:** What are your recommendations for the diagnosis of leptospirosis in dogs?

**Dr. Moore:** Leptospirosis can be challenging to diagnose, due to its varied clinical presentations and the lack of a test that is consistently

accurate at all stages of the disease. Diagnostic tests have different accuracy rates at different stages of the disease. Polymerase chain reaction (PCR) tests of the blood can be positive in the first few days of infection but later become negative. PCR tests of the urine often become positive as the infection then settles into the kidney, yet will be negative if the organism isn't being shed. Antibody response to the infection is only detectable seven to 10 days after infection. And, a titer may indicate the probable infective serovar.

**Morris:** What are your thoughts on current lepto vaccines based on serovar prevalence?

**Dr. Moore:** The current four serovars present in USDA-approved canine vaccines appear to be very effective in providing protection to dogs. It appears to be very unlikely to make a diagnosis of leptospirosis in a properly

George Moore,  
DVM, MS, PhD,  
Purdue University



George E. Moore, DVM, MS, PhD, is a professor of clinical epidemiology and small animal internal medicine within the Department of Comparative Pathobiology at Purdue University's College of Veterinary Medicine. Dr. Moore is also director of clinical trials at Purdue. Dr. Moore received his DVM from the University of Tennessee and a PhD from Purdue. His areas of interest are focused on companion animal epidemiology, clinical trials, evidence-based medicine, infectious diseases and zoonoses.

vaccinated dog. Unvaccinated dogs that are tested for disease occasionally have titers to one or two other serovars not in current vaccines. But, it's uncertain if these titers represent infection by these serovars. Owners should also be aware that vaccines against leptospirosis have been improved in the last decade by the removal of extraneous proteins and are less reactive than vaccines marketed many years ago. n

Continued from page 1

with one group receiving daily subcutaneous injections with human interferon alpha for two weeks and the second group receiving one dose of an intranasal FHV-1/FCV vaccine as immunotherapy. Each day the cats were evaluated and given a clinical disease score. Cats that still had high scores after 14 days of treatment were transferred over to the other therapy. Cats that failed both therapies or had severe ocular disease were given famciclovir as a rescue drug.

The results were impressive. Both treatments were well tolerated and the majority of the cats showed improvement. Of the 26 cats that entered and completed the study, 25 had a significant improvement in clinical score either during initial treatment or shortly after crossover to the other treatment. The one cat that failed both therapies was later found to have proliferative rhinitis.

The group's conclusion was that both treatments would be effective in alleviating chronic clinical signs of upper respiratory infections in cats. The treatments are inexpensive and easy to administer, making them attractive to pet owners and shelter personnel. Dr. Lappin has already begun to present these exciting data to veterinarians and shelters, and he hopes to publish the results of his work within the next year. n



did

# YOU KNOW?



**Morris Animal**  
FOUNDATION

10200 East Girard Avenue  
Suite B430  
Denver, Colorado 80231

When veterinary researchers need help responding quickly to unexpected events, Morris Animal Foundation answers the call.



Through the Betty White Wildlife Rapid Response Fund, the Foundation provides timely monetary aid for animal health research in critical situations. Earlier this year, the Foundation quickly approved funding to help researchers at the National Marine Mammal Foundation investigate the sudden, unexplainable deaths of more than 1,200 sea lions off the coast of California. With this funding, the research team is now working to identify the cause of death of these sea lions in Santa Barbara, Ventura, Los Angeles, Long Beach and San Diego counties.

**vetNEWS**