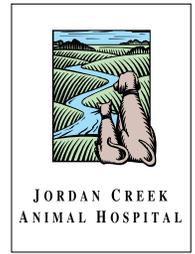




WINTER 2009 Gazette

A newsletter for people and their pets



3401 E.P. True Parkway
West Des Moines, Iowa 50265

in this issue:



Digital Radiology

I-Care

Genetic Testing

Hospital News

Ticks

Xylitol Toxicity

Meet the Staff

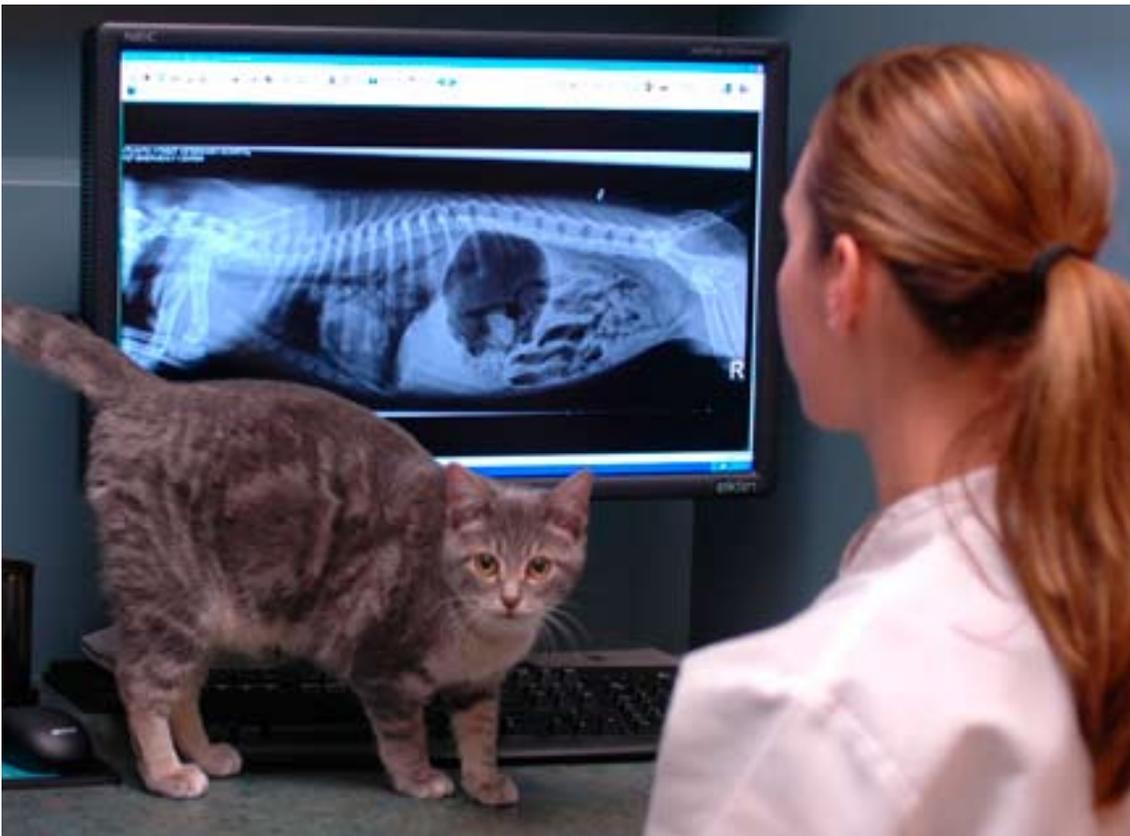
Digital Radiography

Just as digital x-rays have enhanced human mammography, veterinarians are transitioning to digital imaging for pets. We have recently updated our radiology (x-ray) system to digital radiology. Digital imaging provides a number of advantages over conventional film based systems. The first and most important advantage of digital technology is improved patient care. The imaging range of the digital receptor allows us to visualize problems such as hairline fractures that were undetectable with film based systems. Digital images have improved

quality and greater detail that allow us to adjust and enhance areas of interest on each radiograph for better visualization and interpretation. Digital systems are faster at producing an image (which occurs in less than 10 seconds). Another advantage to digital images is the ability to share these images instantly with specialists in radiology, surgery, or internal medicine if needed. The staff at Jordan Creek Animal Hospital is very excited to offer this improved service to our patients.

I-CARE

I-CARE is a program run by the West Des Moines school district that enables students to volunteer at local businesses throughout the community. Jordan Creek Animal Hospital is proud to have been involved with this program for over 8 years. The three schools that we work with are: Stillwell Junior High, Indian Hills Junior High, and Valley Southwoods. We participate by having small groups of 4-8 students volunteer 1-2 times weekly. While they are here, students learn how to properly walk boarding dogs and spend time playing with the boarding cats. We feel very fortunate for the relationship we have developed with the I-CARE program.



Contact us by calling 515-224-9500 or visit our website at www.jordancreekanimalhospital.com



Some Exciting Tests Now Available

Just as in people, certain animal diseases or conditions run in families. A number of tests are now available, using genetic-based technologies, to test for various conditions affecting dogs and cats.

Feline Heart Disease in Maine Coons and Ragdolls

Certain gene mutations may predispose cats to develop a particular type of heart disease known as hypertrophic cardiomyopathy, or HCM. The College of Veterinary Medicine at Washington State University has developed a genetic test to look for a specific gene mutation which is felt to predispose Maine Coon and Ragdoll cats to HCM. Approximately 1/3 of Maine Coon cats test positive. Information is not yet available on the percent of Ragdolls who are positive.

It is important to note that not every cat that tests positive for the mutation will develop HCM, and some cats that test negative still develop HCM, due different causes. However, by knowing your cat's status, we are able to provide increased monitoring and proactive care for his heart.

Drug Sensitivities in Herding Breeds

It is well known that some Collies, Shelties and other herding breeds are highly sensitive to certain drugs. In fact, normal doses of these drugs can be fatal for certain dogs in the herding breed group. Sensitive dogs have been discovered to have a mutation in the MDR1 gene, a gene that produces a protein responsible for keeping these drugs away from the brain. Without this protein, certain drugs accumulate in the brain and cause toxicity. Many of these drugs are anticancer drugs, but others are commonly used antiparasitic, cardiac, pain, or tranquilizer medications.

We now have the capability to test for mutations in the MDR1 gene. So instead of withholding necessary drug treatments in herding breed dogs, we can determine



What Mix is Your Mix?

Breed Identification in Dogs

Do you have a mixed-breed dog? Have you ever wondered exactly which breeds are in Fido's background? The breeds in his background affect not only his appearance, but also his behavior and well-being in many ways.

A blood test is now available by which we can determine your dog's breed ancestry back to the great-grandparent generation. By knowing your dog's genetic information, we can work with you to provide a more specialized care plan specifically tailored to your dog's individual needs. And besides, it's just fun to know why Fido looks the way he does!

if your dog is normal, in which case the drugs can be safely administered. Or, if your pet carries the mutation, we can then consider using alternative drugs or treatments.

Exercise Induced Collapse in Labrador Retrievers

Exercise Induced Collapse (EIC) is a condition which can cause Labs to start to lose control of their hind limbs after intense hunting or other activities the breed is trained to perform. Researchers indicate that up to 30% of Labs carry a mutation in the dynamin 1 gene, and three to five

percent of Labs actually experience EIC. The dynamin 1 gene helps nerves transmit properly, and the mutation can result in the muscle-controlling nerves not working as they should, so the dog's muscles go limp during intense physical activity. On rare occasions the dog may die. We can determine if your Labrador carries this gene mutation by performing a simple blood test.

While these tests are not based upon genetic markers, they are now available to help your doctor diagnose or determine the severity of some diseases.

Cardiac Biomarkers

This test allows your veterinarian to determine if the heart muscle is showing signs of damage. Elevations of a hormone known as "NTproBNP" occur when the heart has been stretched or strained. This blood test can help your veterinarian differentiate between heart and lung disease, detect occult (or hidden) disease, and help assess the severity of heart disease or heart failure. It is used in conjunction with a good history, physical examination, and other testing.

Feline Pancreatitis

Experts believe that pancreatitis (inflammation of the pancreas) occurs in cats much more frequently than we think. Signs of pancreatitis can include: vomiting, lethargy, inappetance, weight loss, diarrhea, and jaundice (yellowing of the skin). Cats, however, often show only the vaguest of symptoms. Pancreatitis has traditionally been very difficult to diagnose in cats due to their non-specific symptoms, lack of good tests for the disease, and long turnaround times when the tests were run.

There is good news. A feline-specific pancreatitis test is now available, with a rapid turnaround time and good sensitivity. It is a special test that can be run in conjunction with standard blood tests. Results are usually available the next day.



Monthly Meetings

The doctors and staff at Jordan Creek Animal Hospital feel that monthly employee meetings are essential to promoting communication and educational opportunities.

Because of this, we will be closed from **1:30-2:30 PM** on the following **Wednesdays: January 7, February 18, and March 18, 2009.**

Ticks: What You May Not Know!

Different areas of the country are home to many species of ticks. Some of the most common ticks found in North America are the American dog tick, Lone star tick, Deer tick, and Brown dog tick. Ticks come in all sizes – they can range from the size of a pinhead to the size of a grape (even before their blood meal)! All species of ticks have a four stage lifecycle that, depending on the species, can take up to three years to complete. They begin as an egg, then hatch into a larva, which molts into a nymph, which then molts into an adult. The larval, nymph, and adult stages all require a blood meal to progress through their lifecycle. If a blood meal isn't readily found in the colder months, ticks can find warm places (under leaves, brush, or rocks) to hibernate until spring. Although tick season lasts from spring until late fall, tick-borne diseases are encountered year-round in people and their pets. Depending on their species, ticks have the ability to transmit disease in all of their life stages. Some of these diseases include: Ehrlichia, Lyme disease, Rocky Mountain spotted fever, Q fever, and tularemia. Due to the seriousness of these diseases, prevention is strongly encouraged for those at risk. While seasonal tick prevention is most commonly used, year-round prevention may be needed for some pets that travel to different areas of the country. Ask us about how to prevent ticks on your pet.

XYLITOL TOXICITY

Xylitol is a sugar substitute found most commonly in sugar-free gum, candy, and foods used in low-carbohydrate and diabetic diets. It is also being added to more oral hygiene products due to its anti-cavity properties. Xylitol is safe in people, however, even in very small amounts, like one piece of gum, xylitol is very dangerous (and can be fatal) to dogs when consumed. It is rapidly absorbed into their bloodstream and can cause low blood sugar, liver failure, and even death. Signs to watch for could be weakness, vomiting or loss of appetite. If consumption is suspected, please contact a veterinarian as soon as possible. The toxicity in cats is not clear at this time, but should still be of concern. There is no cure for xylitol poisoning, but it is easily preventable. Pet-owning households should not consume foods containing xylitol, or be very careful to keep these foods completely out of the reach of pets!

MEET THE STAFF/our editors for this issue of Pet Gazette



Dr. Wendy Johnson is originally from West Des Moines and attended veterinary school at Iowa State University. She is married and has two beautiful daughters who are in fourth and second grades. She also has a golden retriever named Maggie. When not working, she loves to spend time with her husband and

children doing outdoor activities such as swimming, camping, and bicycle riding.



Claudia Larson, veterinary technician, is originally from Lehigh, Iowa. She received her Associates degree in Veterinary Technology from Des Moines Area Community College in May 2008. She currently has a cat named Penelopie. In her free time, she enjoys painting, reading, cooking, listening to music, and being with family and friends.