



Paw Talk



A professional publication for the clients of East Valley Animal Clinic

SPRING 2014

East Valley Animal Clinic
5049 Upper 141st Street West
Apple Valley, Minnesota 55124
Phone: 952-423-6800

Kathy Ranzinger, DVM
Pam Takeuchi, DVM
Katie Dudley, DVM
Mary Jo Wagner, DVM
Kirsten Jagow, DVM

www.EastValleyAnimalClinic.com

Proud to be an AAHA clinic



East Valley Animal Clinic is an American Animal Hospital Association (AAHA) accredited veterinary clinic.

This means that we have voluntarily submitted to a rigorous evaluation of every aspect of our clinic, from record keeping to medical protocols. There are over 900 standards that are evaluated during our triennial accreditation visit. These standards are constantly updated to reflect current trends in veterinary medicine, which means that we are constantly updating our protocols. AAHA accreditation is held by only 3500 of the 23,000 small animal clinics in the United States.

East Valley Animal Clinic is very proud to be an AAHA accredited clinic!

A Golden Opportunity

East Valley Animal Clinic is proud to announce that we have joined a nationwide effort to improve the health of dogs by participating in The Morris Animal Foundation's Golden Retriever Lifetime Study. This is a groundbreaking effort to learn how to better prevent cancer and other diseases in dogs. It is the largest and longest observational study ever undertaken for dogs, enrolling up to 3,000 dogs and lasting 10 to 14 years. Although restricted to Golden Retrievers, the results will benefit all dogs.

One in four dogs over the age of two will develop cancer, and 50% of dogs older than 10 will die of cancer. Golden Retrievers are at even higher risk: 60% of them will develop cancer in their lifetime. You can help change that.

We're asking all of our clients who own qualified Golden Retrievers to consider joining this study. Here is what they're looking for:

- Pedigreed Golden Retrievers with at least three generations documented
- Males and females, intact and neutered
- Between the ages of six months and two years old at the time of enrollment

Participation requires a commitment to bring your dog in for annual examinations. The study requires samples of blood, urine, feces, hair and nails be collected during the exams, and sent to designated laboratories. Samples will also be collected during other "health events," such as illness or injury. You'll have to fill out an online survey about your dog every year. Owners are responsible for the costs associated with the examinations and sample collection, but The Morris Animal Foundation will reimburse \$75 per year to help offset these costs.

The Morris Animal Foundation is a non-profit source of funding for research in veterinary medicine, and has invested over \$70 million in studies that have contributed to diagnostics, treatments, preventions and cures for a number of diseases.

This is a golden opportunity for you and your Golden Retriever to be heroes. Help cure canine cancer by participating in this important study. For more information, contact us, or visit this website: <http://www.caninelifetimehealth.org>. If you don't own a Golden Retriever but know someone who does, please pass this information along.



This is my beautiful Golden Retriever, Riley. She will be 2 in June. I love Golden Retrievers, with the exception that they always seem to leave this life too soon, and always (in my experience) because of cancer. Anything I can do to help prevent this, I am more than willing to do.

I love that East Valley Animal Clinic is supporting this study! Hopefully we can get more folks to join the fight!

— Roxanne Heuer



Healthy Kids

Children who live with dogs and cats, especially in early infancy, tend to be healthier than those who do not. Research has shown multiple benefits of exposure to pets, and the results have been published in several respected journals. For example, a study published in the journal *Pediatrics* in 2012 concluded that children who lived with dogs had fewer respiratory symptoms and ear infections, and needed fewer courses of antibiotics than did children who did not live with dogs.

Although it was established that pets appear to lower the incidence of respiratory illnesses, scientists are still trying to pinpoint the reasons why. A recently published study provided some clues. The study in mice, published in the *Proceedings of the National Academy of Sciences* (PNAS), showed that exposure to "dog-associated" house dust alters the population of microbes in the gut, which in turn increases the number of immune cells in the airway that respond to allergens.

According to the researchers, the next piece of the puzzle will be to determine how the microbes in the gut affect the immune response.

Vestibular Syndrome

Your senior dog has been the picture of health, but one morning she starts staggering like a drunken sailor. The signs look scary. Is it vestibular syndrome?

The vestibular system is the sensory system that gives us our sense of balance and spatial orientation. It consists of structures within the inner ears that send signals to the brain, and the portions of the brain that process those signals. When something goes wrong with any part of that system, it can cause problems such as:

- Loss of balance, falling or an unsteady gait
- A head tilt
- Nausea and vomiting
- Circling, usually in one direction
- Rapid eye movement from one side to the other, known as nystagmus
- An inability to get up

Vestibular syndrome (also called vestibular disease) is characterized by the location of the underlying problem: if the dysfunction is in the brain, it's known as "central vestibular syndrome," and if it is in the inner ear, it's known as "peripheral vestibular syndrome."

Common causes of central vestibular syndrome include brain tumors, trauma/head injury and strokes. This type of vestibular syndrome is often accompanied by additional signs, such as weakness on one side of the body and/or mental dullness.

Causes of peripheral vestibular syndrome, which is far more common, include inner ear infections, hypothyroidism and certain medications. "Old dog vestibular syndrome" may be the most common form of all – this form afflicts senior dogs, and is usually idiopathic, meaning no cause can be found.

If your dog or cat suddenly displays the signs of vestibular syndrome, it's important to seek veterinary help. Unfortunately, these signs alone are not diagnostic, and your pet may have a more serious problem.

Most dogs recover completely within a few days from idiopathic vestibular syndrome, although some may have mild signs that last, such as a head tilt. If your veterinarian has said that the likely cause is idiopathic vestibular syndrome, there are a number of things you can do to help your pet while she recovers.

1. Confine her to a small, safe space, away from stairs, with soft bedding.
2. Keep food and water nearby so she doesn't have to travel far to eat.
3. Provide assistance going outside to potty or to the litter box.
4. Keep a light on at all times, as vision can help her deal with some of the dizziness.

If symptoms do not resolve within a few days, additional diagnostic tests can help determine the underlying cause and appropriate treatment.

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"Tell her you like long walks in the country and snuggling on the sofa, but don't mention anything about drinking from the toilet."



Seizure!

You're awakened from a sound sleep by a loud, rhythmic banging on the floor. You leap out of bed to find your dog in the throes of a grand mal seizure; legs thrashing, eyes wide but unseeing, lips drawn back, teeth bared, drooling and urinating uncontrollably. Heart pounding, you watch helplessly as the seizure continues.

Like the complex circuitry in a powerful supercomputer, electrical signals in the brain are transmitted and processed by networks of special cells, called neurons. When a seizure occurs, there is a flood of electrical activity, causing the neurons to send excess messages to certain parts of the body.

During a grand mal (or generalized) seizure, the entire body is affected. First the whole body becomes stiff (called the tonic phase) for about 30 seconds, then enters a rhythmic phase where the muscles quickly contract and relax, and the animal appears to be "paddling," (the clonic phase), usually lasting about two minutes. Animals (and people) are typically unaware of what is going on during a seizure.

A partial, or focal, seizure, is a seizure where only part of the body is affected, and may appear as facial twitching, for example. A complex partial seizure may trigger what appears to be odd behavior, such as "fly biting" when there are no flies around.

Prior to a seizure, many pets experience an "aura," where they may appear nervous or restless, seek attention or seclusion. The period following a seizure is referred to as the "post-ictal" phase, where pets may be confused or disoriented. This phase can last minutes, hours or even days.

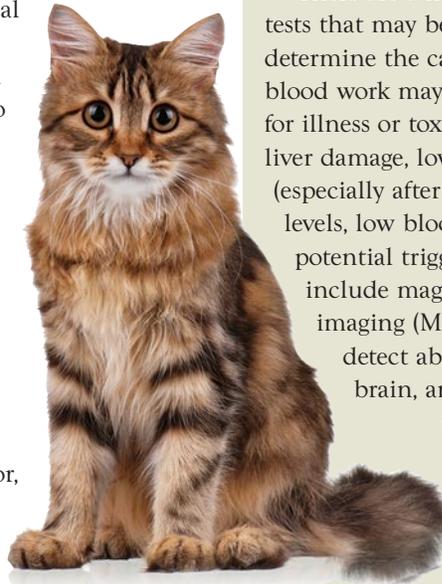
When two or more seizures occur during a 24-hour period, it's referred to as cluster seizures. These are more dangerous, as they may lead to a condition called status epilepticus – an ongoing seizure that lasts longer than five minutes. This is an emergency situation, as the brain may be starved of oxygen and damage can occur.

There are many things that can cause seizures in pets, including:

- Ingesting a toxic substance, such as antifreeze
- Brain tumors
- Head injury
- Illness, such as distemper or encephalitis

Sometimes no reason can be found for seizures, in which case it is called an idiopathic or primary seizure disorder (or idiopathic epilepsy). This type of seizure disorder is more common in dogs than cats, and often does not happen until between the ages of 2 and 5. Seizures that start after age five are often an indication of an underlying cause, such as a tumor. The term "secondary seizures" is used when there is a known cause.

If your pet has a seizure, you should move it to a safe spot where it won't injure itself. Do not try to restrain it or interfere. Try to time the seizure if possible. Block access to stairways, as pets are sometimes confused and uncoordinated when they emerge from a seizure. Contact your veterinarian as soon as possible, and if the seizure will not stop or if another seizure starts soon after it stops, transport your pet to a veterinarian immediately.



Seizure Diagnosis & Treatment

There are a number of diagnostic tests that may be used to try to determine the cause for seizures. First, blood work may be performed to test for illness or toxic exposure, kidney or liver damage, low calcium levels (especially after whelping), thyroid levels, low blood sugar or other potential triggers. Additional tests include magnetic resonance imaging (MRI), which can help detect abnormalities in the brain, and cerebro-spinal fluid analysis (CSF), which can reveal diseases such as encephalitis.

Veterinarians will use drugs such as valium to stop an ongoing seizure, however they will not prevent future seizures from occurring. There are a number of drugs available to manage seizures, which have varying levels of effectiveness with different pets. As with most medications, these drugs can have side effects, so your veterinarian may suggest waiting to determine whether more seizures will occur, and if so, how frequently, before starting the medications.

Seizure medications must be given on a regular basis, as withdrawal can actually cause seizures to occur. It's important to never miss a dose! Don't despair if your pet isn't immediately managed by the medication. Some medications can take weeks to reach therapeutic levels in the blood. Some pets need combinations of two or more drugs before they're successfully managed.

There is no cure for primary seizure disorders, but in most cases they can be successfully managed. Pets who have seizure disorders should not be bred.

"Cats are connoisseurs of comfort."

– James Herriot



Medication Disposal

When your pet has an illness, they may be sent home with medication. Under most circumstances, it is important to finish the medication as directed by the veterinarian. In some cases, you may have some left over. What is the best way to dispose of medication that you no longer need?

In the past the recommendation was to flush the medication down the toilet but that can pollute wastewater and have negative effects on the environment. Water treatment facilities clean up

household wastewater, but are not designed to remove medication from the water. When medications enter the water, they can harm fish and wildlife, and end up back in our drinking water.

According to the Minnesota Pollution Control Agency, unwanted medications can be disposed of in the trash. It is important to first alter the medications to prevent accidental ingestion.

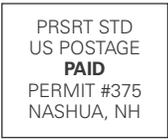
Disposing of Medications at Home

Follow these precautions from the Minnesota Pollution Control Agency to prevent accidental or intentional ingestion. The Minnesota Pollution

Control Agency suggests these precautions:

1. Keep the medication in its original container. The labels may contain safety information and the caps are typically childproof. Leaving the content information clearly visible, cover the patient's name with permanent marker.
2. Modify the contents to discourage anyone from taking the medication. For pills or capsules, add a small amount of vinegar to at least partially dissolve them. Add table salt, flour, or a powdered spice such as mustard to liquids.

continued below



MEDICATION DISPOSAL *continued*

3. Seal and conceal the medication container. Tape the lid shut with duct tape and place the container inside a non-transparent piece of trash, such as an empty margarine tub. For blister packs, wrap packages containing pills in opaque tape like duct tape.

4. Throw the container in the garbage.

Dakota County also has drop-off locations for unwanted medications. Visit www.dakotacountysheriff.org/drugdropoff.html for locations.



WHAT TO DO IN AN EMERGENCY?

East Valley Animal Clinic is available for all of your pet's medical needs, but what should you do if you have concerns about your pet when we are not open?

Emergencies rarely happen at convenient times, so it is wise to have a plan so you know who to call and where to go. We recommend that you keep our phone number available. The next time you stop in, ask for a refrigerator magnet

that has our number and the number of the nearest emergency clinic. Here is the contact information for several local emergency clinics:

South Metro Animal Emergency Clinic
952-953-3737
14690 Pennock Ave, Apple Valley

Animal Emergency and Referral Clinic of Minnesota
St. Paul: 651-293-1800
Oakdale: 651-501-3766

Affiliated Emergency Veterinary Services
Eden Prairie: 952-942-8272