General Information on Seizures

by Dr. Carrie Jurney DVM, DACVIM (Neurology)

SUMMARY:

- 1) If your pet has more the two seizures in 24 hours or a seizure lasting longer than 5 minutes seek urgent veterinary advice.
- 2) There are many potential causes of seizures, and without extensive testing we cannot be 100% sure of the cause of your pet's seizures.
- 3) If your pet has been started on medication, it is very important to give this medication on schedule.
- 4) Keeping a seizure log is very important.

WHAT TO DO DURING A SEIZURE:

- 1) Don't panic.
- 2) Look at your watch. If the seizure is longer than 5 minutes, go to your vet immediately.
- 3) Do not put your hands near their mouth.
- 4) If your need to move them away from sharp corners or stairs, pull them by their legs.
- 5) If you have medications to give during the seizure, give them.
- 6) Sit with them and comfort them until they wake up.
- 7) Things like ice packs or water baths can dangerously lower body temperature. If you think your pet is overheating, go the vet immediately.

ONCE THE SEIZURE IS OVER:

- 1) Mark the event in your seizure log.
- 2) If there have been more than two seizures in the last 24 hours, or if the seizure was five minutes or longer, seek urgent veterinary advice. If they have more than 3 seizures in a 24 hour period seek emergency veterinary attention.
- 3) If seizures are increasing in severity or frequency contact your veterinarian for advice.
- 4) It's normal for your pet to be disoriented or have other abnormal behavior for up to a few hour after a seizure.

EXPLANATION OF THE CAUSES OF SEIZURES:

There are many diseases that can cause seizures. To simplify things, we group the causes of seizures in to three bigger categories: metabolic disease, structural brain disease and idiopathic epilepsy.

1) Metabolic disease:

Problems in the rest of the body, like low blood sugar, toxins or liver failure, can cause the brain to have a seizure. Your veterinarian looks for this category of disease by asking questions about things your pet may have eaten, performing blood work, and sometimes with other tests like ultrasounds.

2) Structural brain disease

A physical problem with the brain itself can cause seizures. Examples of structural brain disease include tumors, brain malformations, strokes, autoimmune diseases or infections. This category of disease



requires special testing to uncover like a MRI, a spinal tap, and/or specific infectious disease testing. The presence of other neurologic problems, like confusion or blindness, make this category more likely the cause of your pets seizures.

3) Idiopathic Epilepsy

This is a very common cause of seizures, especially in dogs who have their first seizures between the ages of 1 and 6 years old. It can happen in younger or older dogs as well as cats, but it is less common than other causes of seizures in these patients. Therefore, advanced diagnostics are more strongly recommended for patients who don't fit the typical protocol.

When a pet has epilepsy, testing such as a MRI will be normal. This is called a "diagnosis of exclusion"-meaning we look for everything else and find nothing. Often if a dog has mild seizures, is in the normal age range and acts normally between episodes we will give that pet a "presumptive diagnosis" of idiopathic epilepsy. This type of diagnosis is a doctor's best guess based on circumstances and is made without testing. If things change- for instance seizure become more severe- it's important to discuss diagnostics again.

We do not know what causes epilepsy, but there is often a genetic component. If you obtained your pet from a breeder it is important that you inform them of your pet's diagnosis.

SEIZURE MEDICATION:

Not all pets that have seizures need seizure medication. However, if your pets seizures are judged to be too frequent or too severe, it's something you and your veterinarian may consider.

Once your pet is placed on seizure medication it needs to be given consistently and on schedule. Make sure you refill the medication at least a week before you run out. Set a timer on your watch or phone to remind you to give the pills. If you miss a pill, contact your veterinarian for advice.

Never stop or change the dose of a seizure medication without first speaking to your veterinarian.

The goal of seizure medication is to make your pets seizure less frequent and/or less severe. The medications are unlikely to make your pet 100% seizure free. The goal is to balance the amount of medication so your pet has the best possible seizure control with the least side effects from medications. All medications have side effects. This balance between seizures and side effects is easier to achieve in some patients than others. Communicating any frustrations you have about your pets medication and side effects to your veterinarian is an important step in finding a happy balance.

Diseases and metabolisms change over time- this means at some point your veterinarian may need to change the doses or type of medication your dog is on. Keeping a seizure log and scheduling regular checkups is an important part of your pet's health.



SEIZURE LOGS:

It is very important to keep an accurate log of how often your pet seizures. It also can be helpful to note things like appointments with your veterinarian and various blood work test on this log. The more organized you can be, the better your veterinarian can help you manage your pet's seizures.

There are many ways to keep a log, from a simple notebook to an online calendar. Pick whatever method will be readily available and easy for you to keep organized.

REGULAR CHECK-UPS AND BLOOD WORK

Your veterinarian is an important partner in controlling your pet's seizures. This means going in for regular check ups. It also means blood work to check for blood levels of medications as well as any side effects. Generally blood work is recommended once to twice a year depending on the medication.

Keys to a successful appointment:

- 1) Bring your pet's seizure log
- 2) Bring all medications with you
- 3) Ask when you make the appointment if your pet should be fasted and if the timing of the appointment relative to medications matter. Some blood test require the pet have no food for up to eight hours before the appointment, other test require your pet to have taken their medication at certain times before the appointment.
- 4) Ask when you make the appointment how long the appointment will take. Some blood test can take several hours to perform.

