# **Idiopathic Epilepsy in Dogs**

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#### SUMMARY:

- 1. Idiopathic Epilepsy is a condition where pets have repeated seizure episodes and no cause can be found despite extensive testing.
- 2. Pets who have seizures more than once a month, or who have severe seizures, should be placed on seizure medications. These medications are given long term, often lifelong.
- 3. Never stop or change a seizure medication without the advice of a veterinarian. Whenever possible it's a good idea to have a single veterinarian be in charge of your pet's medication.
- 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 or after the seizure, get the medications and give them as directed.
- 6. Sit with your pet 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. Long term cluster seizure patients may have different recommendations and should follow the advice of their veterinarian.
- 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 hours after a seizure. If this behavior is worsening or persists longer than 24 hours seek urgent veterinary advice.

#### **EXPLANATION**

Idiopathic epilepsy is a disease where animals have repeated seizures over the course of their life, but despite extensive testing (including blood work, MRI and spinal tap) we can find no cause for the seizures. Think of it as "faulty wiring" in the brain that makes your pet seizure.

Idiopathic epilepsy is the most common cause of seizures in dogs. Dogs with idiopathic epilepsy are generally between 1 and 5 years old at the time of their first seizure and should be completely normal



between seizures. Older or younger dogs may also have epilepsy, but diagnostics are more important in these patients to make sure we aren't missing something.

## **HOW IS MY DOG DIAGNOSED WITH EPILEPSY?**

There is no test for epilepsy. That means to diagnose your dog with epilepsy we must test for everything else and find nothing wrong. This is called a "diagnosis of exclusion". To look for all of the other possible disease we must perform blood work, imaging of the brain (CT or MRI), a spinal tap, and sometimes an infectious disease panel.

Often, in a patient who fits the "normal" profile of a dog with epilepsy, we will skip the bigger diagnostics like MRI. We assume, because they fit the usual pattern and the disease is so common, that they have epilepsy- but it's not proven! This is called a "presumptive diagnosis". If these patients develop new symptoms or are difficult to control with medications, getting the diagnostics done becomes important.

#### IS MY DOG GOING TO BE OKAY?

Many dogs with epilepsy are well controlled with medications. "Well-controlled" can be a little different for every dog, but we generally considered a dog well controlled if they have fewer than 1 seizure every 6 weeks. Seventy-five percent of dogs with epilepsy will be well controlled on one or two seizure medications.

There is unfortunately a group of pets who are not controlled on one or two medications. These patients can be challenging. Sometimes, it's just a matter of finding the right medication, and there are several to try!

There is not one perfect seizure medication that works in all dogs. This means we sometimes we need to try a few medications to find a good fit for your pet. We judge the success of a medication both by its ability to control seizure and also by the level of side effects your dog has from the medications. We love it when a dog has perfect control with no side effects, but often we have to compromise a bit and find that balance of mild side effects and good control.

## WILL EPILEPSY SHORTEN MY PET'S LIFESPAN?

When we look at an overall average, dogs with epilepsy do have a shorter lifespan than dogs without epilepsy. However, many dogs with epilepsy will have a normal lifespan. Dogs with severe forms of epilepsy or serious side effects from medications can unfortunately die secondary to their illness. This is why appropriate treatment and monitoring is so important.

We also see that this disease can cause both financial and emotional strain for the family. Honest communication with your veterinarian about your concerns is important. Loving pet owners often get very fixated on their dog's quality of life and sacrifice their own happiness and security to take care of their pets. While that's very noble, it's okay- no it's important- that you have a good quality of life too. If you are facing significant challenges managing your pet with epilepsy- tell your veterinarian so they can work with you on solutions!



#### LIVING YOUR LIFE WITH AN EPILEPTIC PET

It's important to not let a diagnosis of epilepsy rule your and your pet's life. Your pet can be left alone. You can go to work or the store without your dog! You might miss a seizure now and again, but truthfully most seizures are short and end on their own. Many times there will be a hint that it happened. For example something is knocked over or there is drool on the floor. It's important to record any suspicious events on the calendar and alert your veterinarian of any changes. It's generally more important that your veterinarian know about the overall trend of your pet's seizures than every event.

Your pet does need to receive their medications on schedule. Some patients require exactly timed medication, but for most patients there is some wiggle room. For instance, for the majority of patients, if you are having dinner out and will be home afterwards it's okay to be a couple of hours early or late with a pill.

The only activity we recommend against for all dogs with seizures is swimming. We cannot predict when a seizure might happen, and having a seizure while swimming could result in drowning.

## SPAY/NEUTER

There are two reasons that we recommend spay/neuter in animals with epilepsy:

- 1. Spay/Neuter has been shown to help with seizure control in epileptic dogs.
- 2. Idiopathic epilepsy is a genetic condition in many dogs, and therefore we want to do everything we can to keep these dogs from breeding and passing the disease to their puppies.

#### **SEIZURE MEDICATION**

Not all pets that have epilepsy need seizure medication. However, if your pet's seizures are judged to be too frequent or too severe, it's something you and your veterinarian may consider. For most pets we start seizure medication when we have more than one seizure in a six week period or if seizures are particularly severe.

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, give it as soon as you remember.

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 pet's seizures 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 pet's 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.

#### DO DOGS HAVE SEIZURE TRIGGERS?

In people, we know that sometimes there is a trigger that will cause seizures. Sometimes stories will make the news about a person who has seizures when a certain cartoon or piece of music is played. Some owners will recognize a trigger in their dogs. It can be anything- from a certain smell to an event like an owner leaving town. If a trigger is found, it should be avoided whenever possible.

We also recognize that until a dog is well controlled stressful or particularly exciting things can trigger seizures. So until we have your pet's seizure well under control, try to avoid things that cause too much excitement. For instance if playing frisbee drives your dog absolutely wild, switch to another game like tug of war until the seizure medications seem to be working.

### **DOES DIET MATTER?**

This part of science is still evolving. There are sporadic reports of food allergies triggering seizures- this has not been reported in dogs. There are some studies in people that show a benefit to some diets, like the ketogenic diet. There is a diet made by Purina called NeuroCare that works on this ketogenic diet theory. It has shown some benefit in helping dogs with epilepsy. This diet is prescription, and only available through veterinarians. If your pet does not have any food sensitivities, it may be worth it to try this diet. In the study dogs showed benefit relatively quickly, so you will be able to tell if this diet is working for your pet in a short amount of time.

## 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.

