



## SEIZURES

### So Your Pet Had a Seizure!

Seizures or “fits” are very scary to watch. A seizure occurs when the brain is stimulated with its own “electrical charges” but in an overwhelming and random fashion. Because the brain controls the entire body, when it behaves abnormally the whole animal may be involved.

### What Causes Seizures?

There are many health problems that can result in seizures including epilepsy, brain injury, heat stroke, loss of oxygen to the brain, cancer involving the brain, liver disease, poisoning, abnormal blood sugar levels, abnormal calcium levels, high blood pressure, and other problems affecting the brain. Canine Distemper, Feline Leukemia, Feline Infectious Peritonitis, and other viral infections can cause seizures. Fungal infections involving the brain, such as Valley Fever (Coccidioidomycosis), rickettsial infections such as Tick Fever (Ehrlichiosis), and numerous bacterial infections of the brain can cause seizures.

A common cause of seizures is epilepsy. Epilepsy is defined as seizures of unknown origin. The diagnosis of epilepsy is made only by elimination. Blood tests and other diagnostic procedures are performed to rule out any other possible cause of the seizure activity. A CT scan and spinal fluid tap by a veterinary neurologist may be necessary to diagnose the cause of the seizures, but all seizures are managed similarly on an emergency basis. Any breed of dog may be epileptic. Epilepsy occurs in cats as well, but less frequently than in dogs. Approximately 70% of epileptic dogs can have their seizures controlled by administering anticonvulsant medication. The goal of therapy is to decrease the frequency and severity of seizures. Complete elimination of seizure activity is usually not possible.

### Are All Seizures Alike?

Seizures can vary from a sudden change in personality, to localized muscle twitchings, up to full grand mal seizures, where the entire body is involved. Animals who are seizing may appear to be hallucinating, before, during or after the seizure. The animal may stiffen, lose consciousness, urinate, lose bowel control, salivate, jerk intermittently, appear to be running while it is lying down, and then recover. Or the seizure activity can be limited to chewing, running in circles or into walls, or other unusual behavior. Sometimes the animal will whine or appear uneasy before

a seizure (prodromal period), and after a seizure the animal may pace, walk in circles, and appear disoriented or blind (postdromal or post-ictal period). This period may last from a few minutes to several days.

### What Should I Do If Another Seizure Happens?

Seizures may last from 15 seconds to 5 minutes or longer. During a seizure, place the animal on the ground, away from table legs and chairs, to avoid injury, or move it into cool shade if outdoors. If the animal seizes longer than 5 minutes, veterinary care should be sought. If the animal seizes for a prolonged time period, the body temperature will increase dramatically and can cause permanent brain damage — **DO NOT WRAP YOUR PET IN A TOWEL OR BLANKET!** The built up body heat of a seizure needs to be able to escape.

Seizure patterns are variable, which can make therapy and diagnostics difficult. Veterinarians cannot know in advance what the individual animals pattern will be. There may be many factors that affect seizure activity. The presence of pain or physical irritation may increase seizures. Stress and emotional upsets may increase seizure frequency. Pets are very sensitive to the emotions of their owners. Female animals with seizures should be spayed as hormonal changes will affect seizure activity. The administration of antihistamines, anti-travel sickness medications, and tranquilizers may increase the likelihood of seizures in the epileptic animal.

### Can It Be Treated?

Usually, and the treatments will vary from no treatment at all if seizures occur rarely, to the use of various anticonvulsants and other indicated medicines. Continuous or repeated seizures are controlled on an emergency basis with intravenous sedatives. Often the animal is hospitalized and given intravenous fluids as well. Some animals need to be given a constant slow infusion of medication to control seizures. Emergency blood tests may be performed to evaluate white blood cell count, electrolytes, liver function, etc. Oral anticonvulsant medication may be started, but may take several weeks to be effective. Lifetime daily oral anticonvulsants may be necessary, depending upon the frequency of the seizures.



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**What About the Future?**

Some pets will have a single seizure and never have another one. Others will have multiple seizures and require medicine to control them. As the owner of an animal that has seized, you should know that animals do not suffer while in a seizure. The period of disorientation after the seizure may upset the animal, altering its behavior.

Animals do not swallow their tongues during a seizure, so keep your hands away from the animals mouth during a seizure.

- Keep a “diary” of your pet’s seizures, this will help determine if further tests or medicines may be needed.
- Call us if the seizures are becoming more frequent or more severe or don’t stop within 5 minutes.

*Thank you for this opportunity to serve you!*