SEIZURES

What is it? Seizures are uncontrollable movements and behaviors that are brought on by a sudden onset of abnormal neurological (brain) activity.

Who gets it or what animals are affected by it? Seizures are much more common in dogs than cats but both can have seizures. Dogs and cats can have seizures due to a traumatic blow to the head (brain injury), certain toxins, and a number of different diseases. Pets of all ages can have seizures. In the absence of toxin or trauma induced seizures, the most common cause of seizures in dogs is epilepsy. Epilepsy is a hereditary problem in certain breeds of dogs (e.g. English Springer Spaniels, Vizslas, Keeshonds, Belgian Tervueren, Alsatian Shepherd, as well as Labrador and Golden retrievers). Cats can have epilepsy too; however, it is much less common.

What are clinical signs? Paddling of the limbs or jerking of the limbs (tonic/clonic motor activity), blindness, loss of bladder and bowel control, salivation, snapping of the jaws, loss of awareness or responsiveness, and disorientation and vocalization are all possible.

How is it diagnosed? Reviewing history of the pet as well as breed, environmental exposures, past medical history, and any medications your pet is on is the first step. A good general physical and neurological examination is always indicated. Diagnostics are often performed including blood work, urinalysis, and fecal parasite exam. Less commonly, x-rays, EEG (electroencephalogram), Cerebrospinal fluid tap, or MRI might be recommended.

How is it treated? If there is an underlying disease that is causing the seizures, then the first step in managing seizures is to treat the underlying disease. Symptomatic or palliative control for seizures (especially in the case of pets with epilepsy) is often done with Phenobarbital or Potassium Bromide. Phenobarbital is a tablet, and Potassium Bromide is dispensed in a capsule or in liquid form. Potassium Bromide should not be given to cats as it can cause irreversible damage to the lungs. Other medications can also be used including zonisamide, felbamate, and others. On an emergency basis diazepam (or valium) may often be used by a veterinarian either by injection into a vein or given per rectum. Diazepam is generally not effective in controlling seizures when administered orally.

A key point about epileptic seizures: epileptic seizures are almost never completely stopped; they are controlled. Pets with epilepsy will generally continue to have seizures. The goal of therapy for epileptics is to minimize the severity and frequency of seizures. Pets with epilepsy may require therapy for life.

What is the after care? Initially, careful observation at home with good records of when seizures occur and how long they last may be all that is indicated. Some patients, who have their first seizure, go home with no medications whatsoever. If medications are prescribed, then careful dosing of medications prescribed by your doctor (i.e. do not skip doses, give medications at the same time every day) along with regular monitoring of blood work and physical examination is necessary. Additionally, keeping your pet safe during a seizure is important – i.e. away from stairs or off of furniture so as to avoid falls.
**What is the Prognosis?** Depending on what is causing the seizures, with medication and regular checkups with your doctor, prognosis can be very good and your pet can have good quality of life. In some cases where there is underlying disease, then the prognosis may not be as good; however, many of these patients can be managed in the short term and still have a good quality of life.

**Can it be prevented?** The only time seizure like behavior can truly be prevented is in the case of seizures caused by toxins. Common toxins that can cause seizures include slug bait (metaldehyde), certain rat poison (bromethalin), caffeine, amphetamines, cocaine, lead (chronic exposure), some insecticides, salt toxicity (paintballs, playdough), and strychnine. Epilepsy can be hereditary (see the breeds noted above), so pets that have seizures should NEVER be bred.