



Seizure Information

A seizure is a stressful, scary event for both pets and their owners. The definition of a seizure is an excessive discharge of hyperexcitable neurons in the brain. **Something that can look very similar to a seizure is a syncopal event or “passing out” episode**, which is caused by a decrease of blood flow and oxygen to the brain and is often caused by a primary heart issue. There are two different classifications of seizures: **generalized or partial**. To be considered a true, generalized seizure, both sides of the patient’s brain is affected, and the patient loses consciousness and is often laying on his/her side, moving their limbs back and forth, and having an **autonomic response**, which involves a secretion leaving their body such as urine, fecal matter, vomit, or excessive salivation. Alternatively, pets can have partial seizures involving only one portion of their brain. During a partial seizure, a patient may chomp their jaw, circle in one direction, stumble, run into objects, have spasmodic head movements, etc., but they often maintain their consciousness.

There are **three phases of a seizure**: the preictal, ictal, and postictal phase. During the preictal phase, your pet may start acting out of character by whining, hiding, pacing, or being “clingy,” and this phase can last anywhere from a few seconds to hours prior to the ictal phase. The observed signs and length of time of the ictal phase depend on the type of seizure occurring (generalized vs. partial) and is what most owners see happening and call the “seizure.” The postictal phase occurs after the observed seizure, and during this period, your pet may act dazed or tired. This postictal time can last anywhere from a few minutes to several days depending on the severity of the seizure.

There are **many different causes of seizures** including, but not limited to toxin exposure, low blood glucose (sugar), idiopathic epilepsy (seizures of an unknown cause), liver issues, kidney failure, coccidiosis, a brain tumor or other brain disorders, vascular lesions, head injuries, different cancer types, other metabolic problems, etc. If you suspect that your pet has had a seizure or syncopal episode, it is best to call your veterinarian for a **complete physical exam and possible lab work** to try to determine the nature and potential cause of your pet’s condition. Your veterinarian may recommend a complete blood panel, urinalysis, fecal analysis, and possible abdominal radiographs or ultrasound to evaluate your pet’s internal organs. Sometimes, referral for advanced imaging (**MRI vs. CT Scans**) may be required to diagnose potential brain tissue issues such as tumors, inflammation, fluid accumulation, and infarcts.

Despite a thorough physical exam and laboratory tests, **a direct cause of your pet’s seizures may never be found**. In this case, there are several things to consider before placing your pet on anticonvulsant medication(s). Anticonvulsant medications are not without potential long-



term side effects. It is known that **anticonvulsant medications can lead to liver issues, anemia, and increased drinking, appetite, and urination** over time, and their use should be limited to patients who truly need the seizure control based on the number of seizures they have, the length of those seizures, and the severity of their episodes. Please see the criteria below to help determine if your pet should be placed on anticonvulsant medication.

Your Pet May Need Anticonvulsant Medication If...

- Your pet has more than three seizures in one month
- Your pet has a seizure that lasts longer than 5 minutes
- Your pet has multiple seizures in one day (cluster seizures)

If your pet meets any of these criteria, we recommend a check-up and a complete blood panel to make sure your pet is healthy enough to be placed on anticonvulsant medications. **Once placed on anticonvulsant medication, your pet will need to return for regular bloodwork monitoring** to ensure potential side effects are not outweighing the benefits of the prescribed medication and to evaluate if your pet is on the appropriate dosage of his or her medication. In addition to anticonvulsant medication, it may be recommended that your pet start on various herbal supplements and/or a prescription diet tailored to seizure patients.

Watching your pet have a seizure is very emotional and stressful and can pose several challenges. Staying calm and objective about the situation will help you and your veterinarian make the best decisions regarding your pet's treatment.

Things You Can Do at Home if Your Pet Has a Seizure:

- Keep your hands away from your pet's mouth to prevent an accidental bite
- Dim the lights in the room and stay quiet and calm for your pet
- Video the event if possible to document the length and nature of the seizure
- Check the surrounding area for any possible toxin exposures (empty medication bottles, open household chemicals, exposed food wrappers, etc.).
- Record the date, length of the seizure, and any possible triggers on a calendar
- Call your veterinarian to schedule a wellness check and lab work to rule out possible underlying causes of the seizure

*For more information about seizures, please visit this VCA Hospitals link:
<https://vcahospitals.com/know-your-pet/seizures-and-syncope>