bark & whiskers

Dog Tips Cat Tips

Telltale Signs Your Pet May Be Having a Seizure

Learn what's really happening during those scary moments when your pet seems lost in space. This comprehensive guide breaks down the types, triggers and treatments of seizures, offering hope and clarity to worried pet parents.

Analysis by <u>Dr. Karen Shaw Becker</u>

STORY AT-A-GLANCE

- If your dog or cat has a seizure, it can be a scary event for both of you, which is why it's important to stay calm so you can properly care for your furry family member
- There are a variety of seizure symptoms depending on the underlying cause; there are also many potential triggers, including head trauma, infection, brain tumors, vaccines, and genetic defects
- Pet parents should definitely consider transitioning a dog or cat with a seizure disorder to a ketogenic diet
- They should also put a care plan in place ahead of time, since seizure episodes are anxiety-producing for everyone involved
- There are also several natural therapies that can help these patients and reduce or eliminate their need for anti-seizure medications

Seizures are the result of "a burst of uncontrolled electrical activity between brain cells,"¹ and when they occur in furry family members, they can leave the pet and especially the owner, frightened and unsure what to do next.

Signs of a Seizure

Seizure symptoms tend to be associated with the underlying cause of the condition, which isn't always known.

"Some seizures look like what we all imagine, a pet laying on its side, drooling and shaking, but there are many different types of seizures," says Dr. Christine Rutter, a clinical associate professor of emergency medicine at the Texas A&M School of Veterinary Medicine & Biomedical Sciences. "Seizures can look like fly biting, facial twitching, staring into space and not responding to their name, and several more subtle manifestations.

It is likely for pets that have a seizure to have excessive drooling or urinate and defecate on themselves or in the area where they are seizing. A change in mentation, or mental functioning, is also really common in pets that have a seizure; this can occur before, during, and after the seizure event, lasting minutes to hours. Pets may be clingy, compulsive, fearful, aggressive, unresponsive to voice interactions, or seem lost during a change in mentation."²

There are certain characteristics of seizures that can help identify whether a pet is actually having them. For example, they are often preceded by an aura during which your dog or cat may seem dazed or scared, or she may hide or seek comfort from you. Once a major seizure begins, she'll fall on her side. Her body may grow stiff, or she may make a paddling motion with her legs. Many pets also grind their jaws, drool excessively, vocalize and lose bladder or bowel control.

Needless to say, watching such an event unfold is extremely distressing. But although you're alarmed, it's really important to stay calm. Keep your hands away from your pet's face to avoid being bitten and keep him safely away from stairs or other locations where a fall could injure him.

It's also important to take a mental note of how he was behaving before, during, and after the seizure, as well as how long the episode lasted. If you can also video the event, it can be helpful to your veterinarian.

Epileptic episodes typically last between 30 and 90 seconds. After one, your pet may appear confused or disoriented. He may wander aimlessly or pace, act restless, experience difficulty seeing and have increased thirst or hunger. Recovery after a seizure is sometimes immediate, or it can take up to 24 hours for him to feel and behave normally again.

Potential Seizure Triggers

Determining the cause of a pet's seizures often involves a team effort between veterinarian and owner. There are many potential triggers of seizures in pets, including:

- Head trauma that results in brain swelling
- Bacterial, viral, fungal and parasitic infections
- Cervical subluxation (frequently the result of tugging at a leash attached to a collar instead of a harness)
- Liver disease (a damaged liver can't process toxins efficiently toxins in the bloodstream can cross the blood-brain barrier)
- Metabolic disorders such as hypothyroidism
- Certain human and veterinary drugs, including neurotoxic topical chemicals like flea and tick preventives
- **Brain tumors** (especially in older pets)
- Certain immune-mediated diseases
- Congenital malformation of the brain stem or spinal cord
- Low blood sugar, especially in diabetic pets and those with pancreatic tumors
- Lead, mercury, and plant poisoning, as well as exposure to fertilizers, pesticides, insecticides and herbicides
- Heatstroke
- Veterinary vaccines containing thimerosal, organo-mercury compounds, or aluminum
- Exposure to certain sounds (cats only), aka "feline audiogenic reflex seizures (FARS)" (I believe these may be vaccine-related as well)

The Role of Diet in Pet Seizures

Something else to consider if your pet has a seizure disorder is that nutritionally related health issues can also cause or exacerbate the situation. One problem is **food allergies**, which can cause a systemic inflammatory response that can decrease your pet's seizure threshold.

Another issue is that most commercially available ultraprocessed pet food contains synthetic chemicals, preservatives, emulsifiers and other ingredients that can also cause systemic inflammation and decrease seizure thresholds.

In some cases, potentially seizure-inducing contaminants, including mycotoxins and heavy metals, are **many times higher** than the legal human limits, but are still allowed in pet foods.

Humans with epilepsy are often told by their doctors to switch to a **ketogenic diet** comprised of very low net carbs, reduced protein, and high amounts of healthy fats. It's very important to measure blood glucose, with the goal of keeping glucose less than 80mg/dL and ketone levels above 0.3mM to assure your pet is actually in ketosis.

For years veterinarians thought this nutritional intervention was not successful at managing epilepsy in pets, but a review of past studies showed that carbs (which convert to sugar) were not restricted adequately, so the results were not impressive.

If done correctly, nutritional ketosis has not only proven to be very successful in managing epilepsy in pets, but it's also the standard of care for pediatric epilepsy.³

This way of feeding respects your dog's evolutionary biology, and in addition, other symptoms may also improve on this diet, including a reduction in inflammatory disease. By keeping net carbs low, the body's level of insulin is reset to a much healthier, lower level, which reduces metabolic stress on every cell in your pet's body.

Caring for a Pet With Seizures

Since seizures in dogs and cats are unpredictable and scary, it's important that pet parents have a care plan ready to go. The first thing Rutter recommends is to avoid restraining or moving an animal during a seizure.

"Owners should never attempt to touch the face or mouth of a seizing animal; it is best to observe a seizing pet from a short distance and avoid touching the animal until they are acting like their normal selves," she explains. "Children should never be allowed to handle a pet that has recently seized. Some animals can be fearful or aggressive before or after a seizure, meaning that pets who normally would never bite can be a bite risk."

Instead, ensure the area around your pet is free of objects or hazards that might cause accidental injuries, such as toys or ledges.

"The goal is to ensure both owners and pets aren't harmed, so the best thing for owners to do is make sure the animal is in a safe, calm environment that prevents them from falling or becoming overstimulated," says Rutter.

Some seizures may require immediate veterinary attention, so Rutter advises pet parents to also track details about the seizure, such as the duration, frequency, and aftereffects, to determine if veterinary care is needed sooner rather than later.

"If a pet has a seizure that lasts more than three to four minutes, has more than two seizures in a 24-hour period, or if their behavior does not return to normal within one to two hours of the seizure, the owners should carefully wrap the animal in a blanket and transport them to the nearest veterinarian or emergency veterinary facility for care," Rutter explains.

If the seizure doesn't require immediate attention, you should consider making a non-emergency appointment with your veterinarian to help identify underlying causes and address symptoms.

Beneficial Natural Therapies

There are a wide range of natural substances than can help increase your pet's seizure threshold and decrease the potential for these events, including:

• Chiropractic and acupuncture

- Herbal formulas (including cannabis extracts)
- Homeopathic remedies
- Traditional Chinese medicinals
- Nutraceutical therapies

In mild cases, natural treatments plus a dietary change are often all that is needed to successfully manage the condition. For animals with frequent grand mal seizures, I typically create an integrative protocol of natural therapies and drug therapy. Thankfully many integrative vets now offer telemedicine consultations so you can work with a professional to develop a customized protocol wherever you live.

I always ask pet parents to keep a log of the dates, times, and intensity of seizures. Often there are links between seizures and a particular time of month or year. If we identify a cycle, we can develop a plan to control the episodes using the safest effective treatment options available. Animals with seizures should be **<u>titered</u>**, not vaccinated and should never have exposure to isoxazoline flea and tick veterinary parasiticides.

While seizures can be a very serious and truly frightening condition in pets, the best way to care for your dog or cat is to arm yourself with knowledge about what to expect and how to react, along with designing a proactive preventive protocol with the help of an integrative veterinarian.

Sources and References

^{1,2} Texas A&M University, Veterinary Medicine & Biomedical Services, January 18, 2024

³ The Charlie Foundation