

SEIZURES IN CATS

Seizures and epilepsy are less commonly encountered in cats than dogs. They are, however, the most common sign of disease affecting the front part of the brain in the cat.

Some important terms:

Term	Description
Seizure	Convulsion, ictus, fit - an involuntary disturbance of normal brain control that is usually seen as uncontrollable muscle activity. Seizures can be single and very occasional or may occur in clusters followed by long periods (weeks to months) without seizures.
Epilepsy	Recurrent seizures
Preictal	Aura - the change in character that occurs prior to a fit e.g. nervousness, attention seeking, head turning
Postictal	It can take 24-48 hours for a cat to return to normal after a seizure. This period is called the Postictal Phase and is characterized by a variety of signs including sleepiness, pacing, depression, excitement, excessive eating and drinking
Generalized seizures	Grand mal seizure - jerking movements, rigid limbs, paddling/running movements, loss of fecal and urinary control. The head is often bent backwards along the spine.
<i>Status epilepticus</i>	Continuous seizures for more than 5-10 minutes. Cats in status epilepticus require urgent treatment.
Partial seizures	Very rare in cats. May involve only certain muscle groups or be characterized by behavioral changes (e.g. tail chasing, biting at imaginary objects, aggression).
Absence seizures	Petit mal seizure – minor seizure activity very rarely recognized in cats.

Seizures often occur at times of changing brain activity such as during phases of sleep, excitement or feeding. Affected cats can appear completely normal in between seizures. Many different diseases can lead to seizures so it is important that diagnostic tests are performed to discover the cause of the seizures. Treatment of the underlying disease is most likely to lead to successful control of the seizures. In cats, idiopathic or non-specific epilepsy, which occurs commonly in dogs, is rare.

How can I help my veterinarian to diagnose epilepsy ?

Carefully observing your cat during a seizure can provide valuable information to your veterinarian about the types of disease that may be causing the problem.

1. What age did the seizures begin and are they getting worse?
2. Are the seizures intermittent or did they develop suddenly?
3. Frequency of seizures
4. Association of seizures with sleep, excitement, feeding, etc.
5. Other signs of illness such poor appetite, excessive drinking, reduced exercise, etc.

Information about your cat's lifestyle may also be important:

6. Medications - especially recent deworming or use of flea control products.
7. Diet
8. Access to poisons or toxins

Both diseases that involve the brain directly (intracranial) and conditions that affect other body systems (extracranial), especially liver or kidney disease, can cause seizures. With recent developments in treatment, many diseases that have previously been untreatable may now be treated though this can require referral to a specialist center.

How can a diagnosis of the cause of the seizures be made?

A range of tests are often needed before a final diagnosis can be made. Initially, this is likely to involve blood samples to look for extracranial causes of the fitting. Following this a general anesthetic may be required to allow x-rays of the skull to be taken and the fluid that surrounds the brain (cerebrospinal fluid) sampled. In order to actually look at the brain, powerful imaging techniques are required e.g. magnetic resonance imaging (MRI) and computer assisted tomography (CT). These tests are only available at a limited number of specialist centers.

What treatments are available?

It is important that a cat having regular seizures (more than one every 6-8 weeks) receives treatment even if the cause is not understood because each seizure can lead to further brain damage increasing the likelihood of more severe seizures and complications. In some cases where the cause of the convulsions is not known or is untreatable, the seizures need to be treated directly. A variety of treatments are available. The treatment chosen will depend on each individual case. Several changes of drug dose, frequency and type of drug may be required before the regime that suits your cat best is found. This can be a frustrating time but the benefits of finding the right treatment are important for your cat's long term well-being. Even with treatment it may not be possible to completely prevent seizures. In many cases the aim is to reduce the seizures so your cat can lead a more or less normal life.

Golden rules of treatment

- **ALWAYS** follow the instructions on the label. Both the dose and timing of the medication is important to maintain adequate drug levels in the bloodstream.

- **NEVER** run out of the medication as sudden withdrawal of treatment can lead to serious seizures.
- **LET** your veterinarian know when your supply is running low so a repeat prescription can be arranged. This is particularly important if the treatment needs to be ordered specially for your cat.
- **KEEP** these drugs safe and away from children as they can be powerful sedatives.
- **BE CAREFUL** about other drugs, including herbal remedies, that you give your cat. If in doubt, check with the veterinary practice before giving your cat anything.



What are the side-effects of treatment?

Mild side-effects are common particularly at the beginning of treatment or following changes in the regime. The most common side-effect is sedation but other signs can also occur, most disappear quite rapidly as the cat becomes used to the medication. If side effects persist or seem severe, the veterinary practice should be informed.

**DO NOT CHANGE THE DOSE OR TIMING OF MEDICATION
WITHOUT CONSULTING YOUR VETERINARIAN FIRST**

Why has treatment failed?

Sometimes treatment will appear to have failed. In many cases this is because the dosage and timing of the medication is not yet right. Please check that you are following the instructions on the medication label correctly. In some cases your veterinarian may take a blood sample to ensure that your cat has adequate circulating blood levels of the medication.

Other causes of treatment failure include:

1. Specific circumstances such as stress - increased medication may be required during such periods.
2. Progression of disease.
3. Some cases are uncontrollable even with medication.

Seizures are generally a sign of fairly severe disease; however, this does not mean that nothing can be done for your cat. With the correct treatment, the quality of your cat's life can often be dramatically improved.