

Cat Tips

Everyday Sounds That Can Trigger Seizures in Cats

Researchers have identified a new seizure disorder in cats, and bizarrely, it's triggered by common sounds you'd never suspect of being harmful. The top eight seizure-triggering sounds, the age when it's most likely to occur, and how to treat it.

Reviewed by Dr. Becker

STORY AT-A-GLANCE

- Researchers in the U.K. have discovered a seizure disorder that occurs in older cats and is triggered by certain sounds. The disorder is called feline audiogenic reflex seizures (FARS)
- The reactions the kitties exhibited included the same type of jerking motions seen in epileptic seizures, convulsions, and loss of balance
- The researchers surveyed the owners of 96 cats with the disorder to learn what types of sounds triggered the seizures. All the cats were between the ages of 10 and 19
- The seizures ranged in severity from mild to severe, and the most common trigger was the crinkling of tin foil, which caused seizures in 82 of the 96 cats
- Researchers are working to identify a genetic basis for FARS, and are also preparing a report on recommended treatment for the disorder

Editor's Note: This article is a reprint. It was originally published August 6, 2015.

There's a very bizarre seizure disorder occurring in U.K. cats dubbed "Tom and Jerry syndrome." It was named after the cartoon cat Tom, who has a strong startle reflex and jerks involuntarily when he hears certain sounds.

Cats throughout the U.K. were suddenly having seizures that seemed to be triggered by ordinary everyday noises like the rustling of newspaper, the click of a computer mouse, and other common household sounds.

The reactions the kitties exhibited included the same type of jerking motions seen in epileptic seizures, convulsions, and loss of balance. Less severe reactions included jumpiness, freezing in place, running in circles, and colliding with objects. All the cats recovered once the sound stopped and the seizure resolved.

At the time, a team of researchers in the U.K. was investigating the phenomenon. Veterinarians were actively seeking more cases of the syndrome so the researchers could look for trends, such as whether some cats are more susceptible than others, and whether certain sounds were more likely to trigger a reaction than others.

The story traveled far and wide, and the researchers received hundreds of responses from cat owners across the globe whose pets had also suffered seizures in response to certain types of sounds. One thing most of the owners had in common was that their veterinarians had no clue about the disorder, and often didn't even believe it was a sound that triggered the seizure.

Study Concludes Some Cats Suffer from Feline Audiogenic Reflex Seizures (FARS)

In April of this year, the U.K. researchers, who are from Davies Veterinary Specialists, International Cat Care (a cat welfare organization), and the University College of London, published their findings in the Journal of Feline Medicine and Surgery.¹

The team collected detailed information on 96 cats, including the types of seizures they experienced, how long they lasted, and the sound(s) that seemed to trigger the reaction.

The researchers concluded that some cats do seem to suffer from seizures caused by sounds, and named the disorder feline audiogenic reflex seizures (FARS).

Additional Study Findings

- Some sounds caused non-convulsive seizures
- Some sounds caused brief jerks of a muscle or group of muscles
- Some sounds caused tonic-clonic seizures, which are full-body seizures that last several minutes
- The sounds that most often triggered seizures were:
 - Crinkling of tin (aluminum) foil (82 cats)
 - Typing on keyboard; clicking of mouse (61 cats)
 - Metal spoon against ceramic bowl (79 cats)
 - Clinking of coins, keys (59 cats)
 - Clinking or tapping of glass (72 cats)
 - Hammering of nail (38 cats)
 - Crinkling of paper or plastic bag (71 cats)
 - Clicking of owner's tongue (24 cats)
- Less common triggers included:
 - Tearing foil off packaging
 - Dog collar jangling as dog scratched
 - Cell phone texting, ringing
 - Computer printer
 - Digital alarm
 - Firewood splitting
 - **ϫ** Velcro
 - Wood blocks being knocked together
 - Stove lighting ticks
 - Walking across wooden floor in bare feet or squeaky shoes
 - Running water
 - **❖** The sharp scream of a child (in just one instance)

- Cats of all breeds were affected, but the condition was more common in the Birman breed
- The 96 cats in the study were between 10 and 19 years old, and researchers believe that because older animals tend to have other health issues, a seizure disorder may be overlooked

The researchers confirmed that avoiding making the sounds reduced the cats' seizures, and the louder the sound, the more severe the seizure. As you might guess, owners reported that it was often difficult to avoid certain sounds.

The bottom line: Using a carefully screened survey form and medical records, the U.K. study has revealed a previously unknown syndrome — feline audiogenic reflex seizures (FARS) — in older kitties that has likely been overlooked because senior and geriatric cats often suffer from other concurrent health problems.

Researchers Recommend a Specific Seizure Medication for FARS

The researchers hope that publishing their study results will increase awareness among veterinarians about the condition. Scientists are currently working to identify a genetic basis for the disorder, and the research team is also preparing a report outlining potential treatment options. According to lead study author Mark Lowrie of Davies Veterinary Specialists:

"We have been overwhelmed by the response to our work. A second study is soon to be published suggesting that levetiracetam is an excellent choice of medication in managing this condition. Our experience is that it can completely rid a cat of these sound-induced seizures, including the myoclonic twitches — one owner reported that levetiracetam had 'truly been a miracle drug for my cat'."²

The most commonly used traditional veterinary drugs for seizures in pets are phenobarbital and potassium bromide. Phenobarbital can cause liver damage and is associated with numerous drug interactions.

Potassium bromide is linked to pancreatitis and is never used in cats because it can cause inflammatory lung disease.

Levetiracetam, brand name Keppra, was developed as a human seizure medication that has been picked up for veterinary use. The drug is not broken down by the body — the kidneys remove it unchanged — so it is safe for use in patients with liver disease.³ However, patients with kidney disease (which unfortunately includes a large percentage of older cats) must be carefully dosed and monitored because their kidneys will be less effective at removing the drug from the body.

Another drawback is that levetiracetam must be given three times a day for seizure control in pets. The only short-term side effects reported to date in cats are drowsiness and a temporary decrease in appetite.

Natural Help for Cats with Sound-Triggered Seizures

If your cat has a seizure that seems to be triggered by a particular sound, it's important to speak with your veterinarian about it as soon as possible. Of course, if the seizure is serious and your pet isn't coming out of it, you should seek emergency veterinary care immediately.

If your vet is aware of FARS and recommends levetiracetam (or any other drug) for your cat, proceed with caution and consult with a holistic veterinarian if possible. The rule of thumb is this: an animal must have in excess of one grand mal seizure a month in order to even consider drug therapy.

Obviously, the first thing you'll want to do is try to eliminate the triggering sound from your cat's environment. If that's not possible or there are multiple noise triggers, be aware there are a whole host of natural substances that can help increase your cat's seizure threshold. For example, using acupuncture, herbal, chiropractic, and nutraceutical therapies may help extend seizure thresholds in patients.

If your cat is having seizures, it's important to keep a log of the dates, times, and intensity of the events. There are often correlations between seizures and a particular time of month, year, or even phase of the moon. In the case of sound-induced seizures, the information in your log can be especially beneficial in identifying the triggering noise.

Vaccinosis may also be a root cause of these strange seizures, so don't give additional vaccines of any sort to cats suffering from sound-induced seizures. Detoxifying these patients from previous vaccines may be very beneficial.

In addition to supplements that can help to extend seizure threshold, consider using homeopathy or traditional Chinese medicinals before resorting to conventional treatment.

Your cat should also be eating a "ketogenic diet" containing no carbs, moderate amounts of fat, and high levels of protein. Ketogenic diets have proved helpful in treating human seizure disorders, and it just so happens that a ketogenic diet is the definition of species-appropriate nutrition for cats (and dogs).

Sources and References

Discovery News April 27, 2015 (Archived)

¹ Journal of Feline Medicine and Surgery, April 27, 2015

² ScienceDaily, April 27, 2015

³ <u>VeterinaryPartner</u>, <u>February 10</u>, <u>2025</u>