Seizures in cats result from the dysfunction of a part of the brain called the cerebral cortex. Seizures are caused by an underlying disease that is classified as either primary or secondary. Primary diseases develop from within the brain or brain lining, while secondary diseases come from outside of the brain. Seizures are further classified as either focal or generalized. Focal seizures are most common in cats arising from a single small lesion affecting a limited area of the brain tissue. Possible causes of focal seizures include cancer, infections, abnormalities from birth, and trauma. A cat experiencing a focal seizure may cry as if in pain, yowl, drool, and experience changes such as aggression and disorientation without a loss of consciousness. Paddling in the air and losing bowel control are symptoms common to both generalized and focal seizures. Generalized seizures involve the entire cerebral cortex and may be caused commonly by toxicities and systemic diseases. Idiopathic epilepsy presents as chronic seizure activity without a known cause. Often this causes generalized seizures with loss of consciousness, imbalance, muscle twitching, and stiffening/straightening of the legs.

Diagnosis

Observation of episodes in conjunction with a veterinary visit typically secures the diagnosis of epilepsy. As epilepsy is primarily a neurologic disease, consultation with a veterinary neurologist can provide an expert evaluation and access to advanced diagnostics. Further classification of the seizures as either focal or generalized helps to narrow down possible causes. Typical testing may include bloodwork, urinalysis, thyroid levels, and infectious disease and toxin testing (FeLV, FIV, FIP, toxoplasmosis, bartonella). MRI and CT are especially useful in the diagnosis of a brain lesion(s) such as trauma or cancer.

Treatment and Management

Successful seizure treatment relies heavily on diagnosis of the underlying cause, if possible. Chronic seizure activity, despite primary disease treatment, can be managed with conventional anti-convulsant medications. Anti-convulsant therapies are used when the frequency and severity of the seizures warrants the risk of the medications. Some cats, such as those that have one seizure every 3-4 months, may not always benefit. When needed, several anti-convulsant medications are available with Phenobarbital being the most commonly used. Novel effective anti-convulsant medications are increasingly available as well. With chronic medication use, it is necessary to monitor bloodwork including anti-convulsant drug levels, if applicable, every 3-6 months and with dosage changes. Some cats may have a trigger for an episode, such as extreme stress, around which you can manage the environment as well.

Prognosis

The prognosis for feline epilepsy depends on the cause of the seizures, the temperament of the cat, and owner compliance. Idiopathic epilepsy (unknown cause) generally responds well to typical therapy with oral medications, many of which can be compounded into easier to give forms. Secondary seizures (from an underlying disease) can have a favorable prognosis if the cause can be acutely resolved or chronically managed. Seizures from serious diseases,
such as brain cancer, have a guarded prognosis as the seizure medication may not work or stop working. Using a house call veterinarian for biannual physicals and bloodwork can be less stressful for cats who are difficult to transport. Serious consideration should be given to the ability to manage the cost, medications, time, and follow up needed with the agreed course of treatment. Talk with your veterinarian and veterinary neurologist about an individualized plan for your cat.

**Management Tips**

**Consider providing:**
- Easily accessible food and water
- Access to “safe” quiet areas
- Warm, soft sleeping areas
- Calming, natural products
- Wet food over dry
- Low energy, creative stimulation
- No scent/dye/dust/chemical litter

**Try to:**
- Be consistent with medications
- Gate stairs and dangerous areas
- Track appetite, weight, energy level, etc.
- Track seizure length, time, day
- Limit stress (kids, noise)
- Use gentle handling
- Continue preventative care
- Keep your cat inside
- Provide multiple litter boxes that are easy to access and use
- Keep away from unknown pets
- Use a mobile veterinarian/groomers

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- Access to “safe” quiet areas
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- Low energy, creative stimulation
- No scent/dye/dust/chemical litter

Before your pet’s condition becomes unmanageable, losing quality of life, it is important to begin end-of-life discussions. Learn about pet hospice and/or euthanasia services locally to be prepared.