

Strokes

Small animal cerebrovascular accidents, more commonly known as strokes, are being diagnosed in pets more often today due to the increased availability of veterinary MRI. A stroke occurs either when blood flow to part of the brain is obstructed (ischemic stroke) or when a blood vessel bursts (hemorrhagic stroke), depriving nerve cells of oxygen. In pets, ischemic strokes are more commonly seen than hemorrhagic strokes.

Signs

Strokes often happen suddenly without warning. They are generally nonpainful, but cause an abrupt and severe onset of neurological symptoms in pets. Clinical signs relate to the area of the nervous system where the stroke occurred.

Forebrain stroke signs may include:

- Walking in circles
- Seizures
- Behavior changes
- Pressing the head into a firm surface
- Acute blindness

Brainstem and cerebellum stroke signs may include:

- Balance problems
- Weakness on one side of the body
- High stepping
- Head tremors
- Severe changes in alertness
- Tight circling or spinning

Spinal cord stroke signs may include:

- Sudden pain that makes your pet cry out during activity
- Sudden weakness or paralysis after activity, usually on one side of the body
- Lessening pain after a few minutes or hours
- Symptoms do not worsen after the first 24 hours

Causes

While animals of any age can be affected, strokes are most commonly diagnosed in middle-aged to older pets, and are often secondary to a chronic metabolic disorder. However, about 50% of strokes in pets have no identifiable cause.

It's also worth noting that while any breed of pet is susceptible, some dog breeds seem more prone to strokes such as Greyhounds, Cavalier King Charles Spaniels, and here at Southeast Veterinary Neurology, we see a lot of Miniature Schnauzers with strokes.

Diagnosis

Even though neurological symptoms will often resolve with time, it's important to work with a veterinary neurologist.

If an underlying cause is left untreated, there is risk for further strokes. Many of these metabolic diseases can be screened for with blood and urine tests, blood pressure measurement, chest and abdominal X-rays, and ultrasounds.

But there are also several serious neurological diseases that can cause stroke-like symptoms. Therefore, the best way to definitively diagnose a stroke is with MRI, which captures the soft tissues of the body and can distinguish between issues like compression, obstruction, contusions, and tumors.

MRI is the gold standard for achieving an accurate neurological diagnosis, determining treatment options, and predicting prognosis, based on the size of the affected area and severity of the damage.

Treatment

Stroke treatment involves treating any underlying metabolic disease if identified and/or supportive care to help them regain the ability to eat and drink, walk, and have normal bathroom habits.

Prognosis

Prognosis depends on the underlying cause and whether or not it can be treated.

When there is no underlying disease, the prognosis of strokes in pets is generally good, as animals are quite resilient in their ability to deal with these injuries. Pets can greatly improve in a matter of days to weeks, even if they initially experienced dramatic neurological deficits. A few pets will continue to show neurological abnormalities, but in most cases, this will not substantially affect quality of life.



Learn more about Strokes

