

Dog Neurological Disorders: Stroke

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Did you know that stroke, or what is more accurately called a vascular accident, is the third leading cause of death in people? Since stroke is so common, it seems natural that this condition could affect our four-legged friends. Strokes do occur in dogs and are often associated with an underlying condition such as Cushing's disease, heart disease, or chronic kidney failure.

Fundamentally, a stroke results when a portion of the brain is deprived of blood and oxygen. The most widely known cause is an embolism, or a bloodclot, that gets caught somewhere in the brain and "dams up" a blood vessel. The result is an area of the brain that is starved of blood and begins to die. Strokes can also occur as a result of: a small area of bleeding in the brain, a tumor, a spasm of a blood vessel, or an area of inflammation in the brain that interferes with blood flow. The end result is the same; a dramatic decrease in blood flow to brain tissue downstream from the blockage.

The symptoms and severity of a stroke are dependent on where in the brain the vascular accident occurs. If the blockage occurs in the front portion of the brain, called the cerebral cortex, the symptoms can vary from subtle to dramatic. If the blockage occurs in the brain stem, the portion of the brain closest to the spinal cord, the symptoms are usually more dramatic; limb weakness, postural defects, and a noticeable head tilt may be seen.

Treatment of strokes in dogs is largely symptomatic and involves: maximizing the oxygenation of the brain, treating any seizures that may be present with appropriate medications, and controlling any increase in blood pressure. In severe cases a canine stroke victim may need a respiratory ventilator, and a feeding tube may need to be placed. Extended hospitalization may be needed. Prognosis depends on where the blockage occurs and the dog's response to care over the first few days of treatment.

If your dog demonstrates any dramatic changes in appearance or behavior, contact your veterinarian immediately.

While strokes are common in people, thankfully they are not as common in dogs. In fact, what is often called a stroke may actually be a condition known as [vestibular disease](#).