



Brain Injury in Cats

By PetMD

There are a variety of things that can cause brain injuries in cats, including severe hyperthermia or hypothermia and prolonged seizures. Primary brain injuries, for example, involve direct trauma to the brain, which once acquired, cannot be altered. Secondary brain injury, meanwhile, is the alteration of brain tissue that occurs after primary injury, but this form of injury can be managed, prevented, and improved with optimal supportive care and treatment.

Symptoms and Types

Being that it is a vital organ, the brain requires constant supply of oxygen and nutrition. Any deficiency of oxygen or direct trauma to the brain, therefore, may result in bleeding and fluid buildup, which can cause excessive pressure on the brain. This in turn can cause complications involving the heart, eye, and several other body systems. Symptoms vary and depend on the cause and severity of the brain injury. Some of the more common symptoms include:

- Loss of consciousness
- Abnormal posture or irregular movements
- Ear or nose bleed
- Bleeding inside the eye (involving the retina)
- Bluish discoloration of the skin and mucous membranes (cyanosis); a sign that oxygen in the blood is dangerously diminished
- Insufficient oxygen reaching body tissues (hypoxia)
- Purplish or bluish patch under the mucous membranes) or under the skin due to ruptured blood vessels (ecchymosis)
- Red or purple spot on the body caused by a minor hemorrhage (petechiation)
- Heavy or rapid breathing (dyspnea or tachypnea, respectively)
- Abnormal heart functions, such as abnormally slow heart rate (bradycardia)

Causes

The following are some of the more common causes to brain injuries:

- Head trauma
- Severe hypothermia or hyperthermia
- Abnormally low of blood glucose (severe hypoglycemia)
- Prolonged seizures or shock
- High blood pressure

- Brain parasites
- Brain tumors
- Infections involving the nervous system
- Toxicity
- Immune-mediated diseases

Living and Management

For cats with minimal primary or secondary brain injuries, the overall prognosis is good. In fact, if no deterioration is observed within 48 hours following the head injury, the cat has a good chance of full recovery, which may take more than six months, depending on the cause and treatment of the condition.