

Ask A Vet: Beware of Heatstroke Dangers

Sunday, June 12, 2016

Dear Dr. Weldy's,

I was in conversation with a neighbor that told me they had to take their 7 year old Labrador to the vet because he was acting strange and was told he had heat stroke. What causes this and how does a person recognize that condition?

-Steamed Up

Dear Steamed Up,

This is an excellent question especially as the ambient temperature is increasing due to summer weather. Let's first define heat stroke and a close condition to it, hyperthermia. Hyperthermia is an elevation in body temperature above the accepted range. We generally think average temperature is 101.5 for dogs and cats. Therefore, we regard above 103 degrees Fahrenheit to be abnormal. Heat stroke is considered to be a non-fever hyperthermia where mechanisms in place in the body that can dissipate (remove or undo) the changes fail to handle high external heat. It is generally thought that temperatures above 106 that are not associated with obvious inflammation or sepsis can lead to multiple organ dysfunction with heat stroke. Fever type hyperthermia is usually associated with sepsis but non-fever hyperthermia can be associated with excessive exercise, too much thyroid hormone in the body or lesions in the hypothalamus part of brain that regulates temperature in the body.

Symptoms of heat stroke include: panting, excessive drooling, dehydration, and temperatures above 103, reddened or pale gums, thick sticky saliva, rapid heart rate or irregular heartbeats, trouble breathing, vomiting, diarrhea with black tarry stools, depression seizures, muscle tremors, wobbly or ataxic gait and sometimes becoming unconscious and unresponsive to wakening. Causes of these things can range from hot weather conditions and poorly ventilated rooms to upper airway disease that restricts air flow. It also can be caused by paralysis of the larynx (voice box) or poisoning due to insecticides. In addition, it can be associated with anesthesia complications or excessive exercise. There are certain conditions or risk factors that one should be aware of. This can be history of heart disease or pulmonary (lung) disease, very young or very old patients, obesity, failing to acclimate to temperature extremes, hyperthyroidism, thick coated dogs or short nosed / flat faced dogs, dehydration or lack of access to water. As the condition worsens, it can lead to seizures, coma or even death.

More importantly is to know what and not what to do. First thing is to remove the pet from hot areas immediately. Then apply cool wet towels over the neck and under armpits and groin areas. Do not cool too quickly. Put fans on the pet to increase air flow or put in air conditioning. Take rectal temperatures every 5-10 minutes. Once the temperature drops to 103 remove wet towels and dry off the body and cover with a cool blanket so as to not to lose too much heat too rapidly. Allow free choice water. Provide shade for outside dogs. Don't jog your dog on hot days and stay off of hot asphalt when jogging. Contact your veterinarian for further treatment as needed and more importantly use common sense.

-Dr. Wanda Schmeltz