

Tracheal Collapse

- Tracheal collapse occurs in dogs when the cartilage of the trachea loses some of its stiffness, causing the wall of the trachea to collapse inward as the dog breathes.
- Clinical signs may not occur unless a secondary condition is also present; these include being obese and inhaling irritants such as cigarette smoke. Clinical signs tend to be worse during hot, humid weather or when the dog exerts himself or herself.
- In many cases, the condition can be controlled with medication and eliminating contributing factors (such as obesity). There are also surgical procedures that may help treat the disease.

What Is Tracheal Collapse?

The trachea is the main airway that starts at the back of the throat and continues down into the lungs. Under normal circumstances, the trachea (made mostly of cartilage) is fairly stiff and shaped like a tube. However, in some dogs, the cartilage of the trachea loses some of its stiffness over time. As a result, the wall of the trachea begins to collapse inward as the dog breathes. Instead of the inside of the trachea being shaped like a circle (tube), it can take on a half-moon shape or collapse even more severely into a more flattened shape. This is what occurs with tracheal collapse.

Tracheal collapse is more common in small, toy breed dogs than in other dogs. Pomeranians, Yorkshire terriers, and toy poodles are commonly affected. Dogs of any age can be affected, but most dogs are middle-aged when their owners begin to notice a problem. Cats tend not to develop this condition.

What Are the Clinical Signs of Tracheal Collapse?

The most common clinical sign associated with tracheal collapse is a dry, nonproductive cough—meaning mucus or other material is usually not expelled. Some owners also describe a “goose honking” cough. In severe cases, the dog may collapse as it struggles to breathe.

Over the long term, as the coughing persists, the trachea becomes irritated and inflamed, which leads to even more coughing.

Research has shown that even if a dog develops tracheal collapse, clinical signs may not occur unless a secondary condition is also present that contributes to the development of clinical signs. Secondary contributing factors include being obese and inhaling irritants such as cigarette smoke. Clinical signs also tend to be worse during hot, humid weather or when the dog exerts himself or herself, such as during exercise or excitement.

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How Is Tracheal Collapse Diagnosed?

The first steps in diagnosing tracheal collapse involve obtaining a medical history and performing a physical examination. When your veterinarian listens to your dog's lungs with a stethoscope, wheezing can sometimes be heard over the trachea. Sometimes, applying gentle touching or pressure over the trachea can cause the dog to cough.

Your veterinarian may recommend tests to investigate other conditions that can cause coughing, such as heart disease and heartworm disease.

Sometimes, tracheal collapse can be seen by taking radiographs (x-rays) of the dog's lungs. However, the trachea may not collapse with each breath, so sometimes radiographs may look normal. More specific testing may include ultrasound examination of the chest and neck or sedating the patient so that the veterinarian can examine the throat using a fiberoptic endoscope.

Common Conditions

What Is the Treatment and Outcome for Tracheal Collapse?

If a dog presents with severe breathing problems associated with tracheal collapse, emergency care and hospitalization may be recommended. Oxygen therapy to ease breathing; medications to reduce coughing, open up the airways, and decrease inflammation; and possibly a light sedative may be recommended initially.

For more chronic cases, treatment is aimed at reducing the cough and controlling inflammation. If the dog is overweight, this should be addressed as part of the treatment for collapsing trachea. If

possible, other things that can incite coughing, such as breathing cigarette smoke, should be eliminated. Because the trachea is irritated, any pressure on the trachea can lead to coughing. For this reason, your veterinarian may recommend that you use a harness on your dog instead of a collar. There are surgical procedures that may help treat tracheal collapse. Your veterinarian will evaluate your dog and discuss medical (or possibly surgical) options with you.

Although some amount of coughing may persist for the rest of the dog's life, outcome for dogs with tracheal collapse can be very good, especially if contributing problems such as obesity are controlled.