

Chronic Bronchitis

By Dr. Karen Becker

Hi, this is Dr. Karen Becker. Chronic bronchitis is a condition in which there is persistent inflammation of the mucous membranes of the bronchi, which are the airways that carry oxygen from the trachea to the lungs. Over time, the airways become thickened and narrowed, reducing the animal's ability to inhale and exhale air properly, adversely affecting the normal transport and exchange of oxygen, carbon dioxide, and other substances. The disorder is also known as chronic obstructive pulmonary disease (COPD).

Causes

Chronic bronchitis is seen most often in toy and small dog breeds, including the West Highland white terrier and the Cocker Spaniel. However, large breed dogs can also develop the disorder. Obesity is often a complicating factor for dogs with chronic bronchitis. Cats also acquire COPD, especially Siamese and domestic shorthairs.

Triggers for bronchitis include: bacterial and viral infections, internal parasites (such as lungworms and heartworms), feline asthma, airborne fumes (including second-hand smoke and room deodorizers), household chemicals (including the off gassing of polybrominated diphenyl ethers (PBDEs) or flame retardants present in most upholstered surfaces and pet beds), cleaning products (which kind of falls under bronchitis, being a symptom of multiple chemical hypersensitivity syndrome). Also, black mold and dust can exacerbate the condition.

When bronchitis occurs suddenly or acutely, it's typically caused by infectious organisms, such a virus, bacteria, or lung parasite.

Symptoms

The classic sign of bronchitis is a harsh, dry, hacking cough that may or may not be productive. When the condition is chronic, the cough lasts more than two months and is not the result of any identifiable condition, such as heart failure, neoplasia (which means cancer), infections, or other respiratory diseases.

The cough is often worse when the animal is exercising or engaging in physical activity, is under stress, or when there is physical pressure placed on the trachea (or the wind pipe), such as when a dog restrains against a collar or leash. A pet with a cough should always wear a harness for restraint and not a collar, which goes around the neck and trachea. Cats with bronchitis tend to hunch down in a squat position and stretch their necks out when they cough.

Other symptoms of COPD can be fever, retching or gagging, actually passing foamy saliva at the end of a coughing fit, wheezing, sneezing, runny eyes, weeping eyes, exercise intolerance, lethargy, difficulty breathing, rapid breathing, or decreased activity level. There could be a lack of appetite, weight loss, or in worst-case scenarios, bluish discoloration of the mucous membranes (which is called cyanosis), and in very rare conditions, spontaneous loss of consciousness from a lack of oxygen. Very rare.

Diagnosis

Chronic bronchitis is a diagnosis of exclusion, meaning it is made after all other potential causes of your pet's symptoms have been ruled out. Your veterinarian will take a complete history on your pet and perform a physical examination.

In chronic bronchitis, the cough can oftentimes be triggered by palpating the trachea. In addition, your vet will be able to hear lung sounds characteristic of the disorder.

Chest X-rays will be taken, along with a complete blood count (CBC), a serum biochemistry profile, and a urinalysis. Your vet may also decide to test for the presence of lungworms and heartworms. He or she might want to obtain a sample of cells from the airways to check for the presence of a bacterial infection in a process called a transtracheal wash.

Sometimes bronchoscopy, using an endoscope with a camera at one end, may also be performed so your vet can visualize the lining of your pet's upper respiratory tract, and take samples of tumors or abnormal findings within the airways. Lastly, an echocardiogram may be performed in the event your vet suspects congestive heart failure.

Treatment and Recommendations

Treatment is aimed at eliminating the underlying causes of the condition, if they're known, and relieving inflammation of the lining of the airways, resolving any secondary respiratory tract infections and slowing down the progression of the disease. It's also important to alleviate the frequency and severity of the coughing.

It's important to note that it's rarely possible to completely eliminate coughing in a pet that has chronic bronchitis, but the goal is to control the coughing naturally as much as possible, and eliminate all the triggers that could be exacerbating the condition.

Any identified and potential triggers for airway irritation should be removed from your pet's environment, including dust, mold, airborne fumes, perfumes, carpet cleaners, air deodorizers, fertilizers and pesticides, cigarette smoke, and smoke from a fireplace or a wood-burning stove.

Remove all toxic pet beds from your house. If you're in a brand new home where you could have toxic off gassing from paints, carpets, and new furniture, I do recommend that you get an in-room air purifier in addition to the probable whole-house filter that came on the furnace.

Obese pets must be gradually and safely dieted down to a healthy weight, because excess weight exacerbates all breathing problems. Exercise is important for pets with COPD, because it will help clear airway secretions. But it's important that it'd be done gradually, as oftentimes sudden exertion of exercise can actually exacerbate coughing.

Coupage, or a type of vigorous thoracic massage and phlegm-releasing hands-on therapy, can also be really beneficial. Your veterinarian can show you how to do that.

Traditional treatments for chronic bronchitis include anti-inflammatory drugs, cough suppressants, bronchodilators, and antibiotics if there's a bacterial infection present.

Integrative or holistic options include homeopathic remedies, ozone therapy, nebulization therapy with mucolytic agents (such as n-acetyl cysteine (NAC), the trade name is called Mucomyst), diffusing small amounts of essential oils (including eucalyptus, lemon, and thyme), as well as oral supplementation of NAC, glutathione, and herbs (such as turmeric, mullein, oregano, olive leaf, and slippery elm). Those can all be really beneficial.

Reducing pro-inflammatory processed foods can help, as well as limiting unnecessary vaccines – thereby limiting unnecessary immune stimulation, which can prompt an inflammatory response.

Chronic bronchitis is a progressive disease that causes physical and physiologic changes in the airways of your pets. However, most affected dogs can be well-managed medically and can go on to enjoy a really excellent quality of life and a normal lifespan.

If your cat has chronic bronchitis, it's important to reduce any and all of those stressors in her environment as well as the trigger. It's important that her environment be quiet, comfortable, clean, and safe.

Very often, chronic feline asthma leads to chronic bronchitis in kitties. The asthma must be well-controlled in order to manage concurrent COPD. Bronchitis in kitties can be life-threatening if it isn't managed appropriately. It's important that persistent coughing be managed well. Consistent unaddressed coughing can actually damage a kitty's airways, interfere with her ability to eat normally, as well as ultimately affect her immune system, which can set her up for secondary bacterial and viral infections.

If your pet has been coughing for a while and you don't have a diagnosis, ask your veterinarian about the possibility of chronic bronchitis, then begin eliminating triggers and treating your pet with the integrative management tools I've just suggested.