

What is Laryngeal Paralysis?



By Adam Rosenberg, DVM
Animal Emergency & Specialty
Center - Parker, Colorado

neuromuscular diseases. Acquired laryngeal paralysis is most commonly seen in middle aged or older, large breed dogs. The most commonly affected breeds include Irish Setters, Labrador and Golden Retrievers and St. Bernards. Rarely, dogs can be born with this condition and show signs at an early age. Breeds associated with congenital disease are Bouvier de Flandres, Siberian Huskies, Bull Terriers and Dalmatians.



Photo by Todd Arena

What to Watch For

Early signs can include a voice change, gagging or coughing during eating or drinking, shortness of breath or noisy breathing. Later stages include difficulty breathing, cyanosis (blue color to the gums and tongue due to a lack of oxygen in the blood) and fainting. In sudden/severe cases, a dog may develop respiratory distress, a very high body temperature and can result in death. Hyperthermia occurs because the dog's primary means of cooling (panting) is severely compromised. During a severe episode, the larynx can become swollen, further obstructing the flow of air into the trachea.

As pets come out of the winter months, are more active, and outside temperatures are higher, mildly affected animals can develop worsening signs as their need to pant increases.

The larynx (voice box) is a complex structure, composed of a series of cartilage plates and folds of tissue. It closes and opens to prevent the aspiration of water and food, as well as air passage, into the trachea (windpipe). Laryngeal weakness or paralysis occurs due to malfunction of the muscles that move the larynx into the open position, the nerves that control these muscles, or a combination of the two. The end result is the failure of the larynx to open normally, leading to obstruction of the airway.

About 90 percent of all cases of acquired laryngeal paralysis have no identifiable cause. The minority of cases can be caused by trauma to the neck area, tumors in the neck and chest, and some types of endocrine or hormonal disorders, such as hypothyroidism and

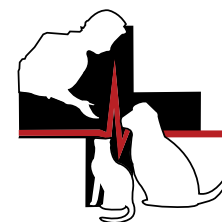
Diagnosis

To differentiate laryngeal paralysis from other conditions, a careful examination by your veterinarian should be performed. Listening to the pet with a stethoscope and chest x-rays can help rule out primary heart and lung disease. Direct visualization of the movement of the larynx, performed under heavy sedation, is the definitive method to diagnose laryngeal paralysis. Blood tests looking at thyroid levels, as well as testing for Myasthenia gravis, can further determine the cause of your pet's disease.

Treatment

Mild cases can be managed with controlled exercise, maintenance of healthy body weight, and avoiding stressful situations. Occasionally,

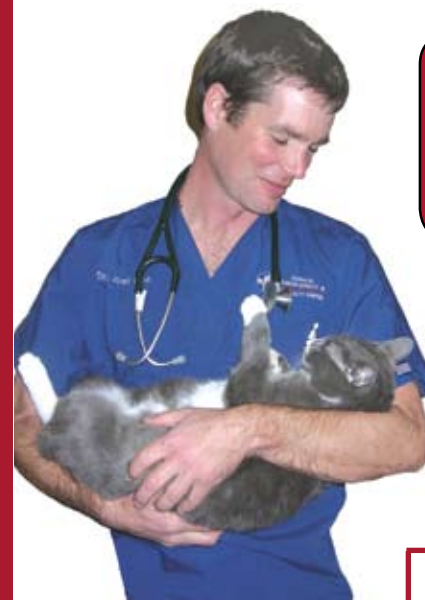
continued on page 16



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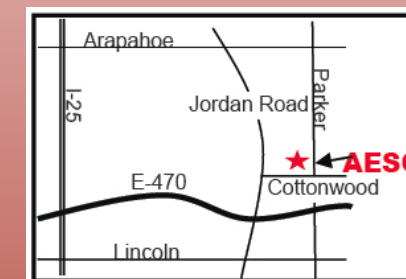
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Laryngeal Paralysis (continued)

oral sedatives or tranquilizers can be employed to further minimize a pet's need to pant. A neck collar should be replaced by a harness to prevent pressure on the neck structures, causing further laryngeal dysfunction.

In moderate or severe cases, dogs with difficulty breathing are in critical condition and require immediate life-saving veterinary care. Initial care can include supplemental oxygen, sedation, drugs to decrease swelling of the larynx and in the most severe cases, placing a breathing tube to bypass the larynx and re-establish a clear airway. Rapid cooling of your pet, such as with cold water from a

hose, should be avoided. Additional life-threatening complications can occur when the body temperature is lowered too rapidly.

Once stabilized, surgical treatment is ideal. Although technically very demanding, the surgical procedures available to correct this condition often are very successful. A common procedure performed is where one side of the laryngeal cartilage is sutured into the open position ("tie-back"). Regardless of surgical procedure, the most common complication after surgery is the development of aspiration pneumonia. This occurs when food and/or water is breathed

into the lungs because the normal protective mechanism of the larynx has been altered. Owners can experiment with different types of foods, and mixing water into foods, to minimize this complication.

Conclusion:

If you have noted a change in your pet's bark, an increase in the amount of panting even without significant exercise, or noisy breathing, have your dog evaluated by your veterinarian. Early diagnosis and intervention prior to a breathing emergency carry the best prognosis for your beloved family member. 🐾

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The Doggie Meetup Scene

Scheduled Meetup Events:

Date/Time	Meetup Group	Location
Sat. 6/21 8:00 a.m.	Denver Metro French Bulldog	Chatfield State Park
Sat. 6/21 6:00 p.m.	Standard Poodle Fun Club	tbd
Sat. 6/21 2:00 p.m.	Zen Dog Chihuahua	tbd
Fri. 6/27 6:00 p.m.	Denver Great Dane	Redstone Park
Sat. 6/28 5:00 p.m.	Denver Boxer	Tony Grampsas Park
Sat. 6/28 5:00 p.m.	Denver Small Breed	Mutt-Mutt Palace
Sat. 7/19	Great Dane - Annual Picnic	tbd
Sun. 7/20 8:00 a.m.	Great Dane - Lucky Mutt Strut	Washington Park

Meetup Groups

Meetup Groups	Members	Rating
5280 Toy Dog Meetup	20	4
Cherry Creek State Park (off-leash)	105	5
Colorado Italian Greyhound of America Rescue	58	4.5
Denver Border Collie	56	4.5
Denver Boston Terrier	181	4.75
Denver Boxer	302	4
Denver Chihuahua	95	5
Denver Dachshund	50	4
Denver Doggie Happy Hour	534	4.5
Denver Great Dane	265	4.5
Denver Irish Wolfhound	28	4.75
Denver Metro French Bulldog	99	5
Denver Shiba Inu	39	4.75
Denver Small Breed	109	4.5
Denver Yappy Hour	649	4.5
Dog Day Afternoon (leash free)	81	4
Littleton Corgi	15	4.5
Mile High BIG DOG Mastiff	159	4.75
South Metro Pug	51	4.5
Standard Poodle Fun Club	56	4.5
Weekend Hikers...plus	1,068	5

For more information or to join one of these groups, go to www.meetup.com