

# LARYNGEAL PARALYSIS

## **ABOUT THE DISEASE**

In canine patients, typically due to an unknown cause (idiopathic), one or both of the laryngeal folds stop functioning and results in the disease referred to as **laryngeal paralysis** (abbreviated **lar-par**).

The larynx is located in the throat, which marks the beginning of the trachea, easily palpated as a firm boney-like structure on the neck. The larynx contains several structures including the laryngeal folds and vocal folds. The normal function of the laryngeal folds close when swallowing occurs, as well as to open when a normal breath is taken.

When the laryngeal folds become paralyzed, they do not open properly when patients inhale. Most notably in low-grade cases, caregivers may hear their patient "roar" while inhaling a normal breath. These respiratory sounds are often worse during times of exercise or excitation.

As **laryngeal paralysis** worsens, breathing becomes more labored, respiratory distress develops, and some patients progress to blue gums (cyanotic), loss of consciousness, and sometimes even death. Also, because canine patients pant to lose body heat, many are more susceptible during the hot times of the year as well as at an increased risk for heat stroke.

## **OBTAINING A DIAGNOSIS**

Typically, a clinical history and thorough examination provide a presumptive and sometimes definitive diagnosis for **laryngeal paralysis**. In more subtle cases, a sedated oral examination can allow the veterinarian to directly visualize dysfunctional laryngeal folds.

X-rays (radiographs) are not useful for determining laryngeal dysfunction but can help determine other issues like bronchitis or pneumonia which may cause patients to breathe harder. Please see the <u>Pneumonia</u> document for additional information.

Patients who are suffering heat stroke as a result of **lar-par**, will require additional systemic testing to determine if other damage or degeneration has occurred.

### TREATMENT

Sudden respiratory distress requires immediate, critical intervention to restore normal blood oxygen levels. Many patients are given twilight sedatives or anesthetics, anti-inflammatories, and oxygen support to help bypass the acute respiratory distress.

Heat stroke will require measures to increase systemic stability (intravenous [IV] fluids, etc.) and reduce body temperature, often warranting hospitalization.

Long-term treatment can include both medical management and surgical management.

Long-term medical management includes ongoing anti-inflammatory support, sedation when needed, reduction in outdoor exposure during hot months, and reduction in activity (running/etc.).

Surgical management requires the intervention of a veterinary surgeon to "tie-back" the dysfunctional laryngeal folds. Several factors must be considered before a patient can undergo this surgery; not all dogs with **laryngeal paralysis** are candidates for this surgery. Consultation with a surgeon will help finalize the decision for surgical intervention.

### **TIPS FOR SUCCESS**

- Have the patient evaluated when respiratory sounds develop or worsen.
- Do not allow these patients outdoors during hot times of the day.
- Do not encourage vigorous exercise (ball, fetch, etc.).