What Is It?

Laryngeal paralysis (LARPAR) is a disorder that arises from the loss of normal larynx function, commonly affecting middle aged to older dogs. The larynx’s main function is to protect the trachea (wind pipe) and esophagus. The larynx is comprised of several flaps of cartilage, also known as the laryngeal folds, found in the back of the throat above the windpipe. The flaps comprising the larynx attach to muscles that control the flaps, opening when the pet breathes in, then closing when the dog is drinking or eating to protect the airway. With LARPAR, paralysis of the larynx causes the laryngeal folds to stay in a closed position despite the pet breathing heavily and therefore obstruct the airflow into the windpipe. LARPAR can also affect other parts of the body besides the larynx, called Generalized Form of the disease. This causes nerve dysfunction evolving within 1-2 years of diagnosis. The most common type of LARPAR seen in dogs is idiopathic, meaning there is no known definitive cause of the disease. Several breeds including Golden Retrievers, English Setters, Labrador Retrievers and Newfoundlands are more commonly reported.

Diagnosis

A LARPAR diagnosis is based upon a physical examination and discussion of clinical symptoms at home. As the laryngeal muscles degenerate into paralysis there are several specific clinical symptoms; the most common is noticing very noisy breathing especially when breathing in and panting. Over time, dogs may have difficulty with eating and drinking; they may cough, gag, and regurgitate. Some owners notice a voice or bark change along with exercise intolerance. Some dogs can last years before showing clinical symptoms but once the dog begins to experience airway obstruction due to the LARPAR, especially in stressful situations, hot weather, and exercise, the pet is at risk for collapse and respiratory distress. Many pets display the classic increased lung sounds when they breathe in which is audible in the physical exam. Based on the clinical suspicion, a definitive diagnosis can be reached with a sedated laryngeal exam which allows for visualization of the failure of the larynx to open when the dog tries to breath. Additional testing may include a full neurological exam, blood work, thyroid panel testing, x-rays, and infectious disease testing.

Treatment and Management

Treatment options range from conservative, to surgical, and aggressive. Conservative therapy may be appropriate for those dogs that are not yet significantly affected with poor quality of life. Options in these early stages include weight management, low energy to moderate exercise, environmental management, and anti-inflammatories and antihistamines to decrease laryngeal swelling and mucous secretions. Once the quality of the pet’s life suffers, surgery might provide a better option for management. A “laryngeal tie-back” is the most commonly performed procedure wherein one of the two sides of the paralyzed larynx is sutured (tied) back permanently. This tie-back of one side of the larynx removes the turbulent airway flow from the two paralyzed flaps. However, not all dogs are good surgical candidates. Possible complications of the surgery include aspiration pneumonia as the dog has an unprotected airway.

Prognosis

The prognosis is generally good, as this is a slowly progressive disease that typically spans over several years for the most commonly diagnosed form, idiopathic laryngeal paralysis. For dogs with a reasonable level of good health with more severe
symptoms, surgical tie-back of one of the laryngeal folds can provide a significant increase in quality of life and survival time. Improvement of clinical signs and quality of life is generally good to excellent for idiopathic laryngeal paralysis. Dogs that develop generalized symptoms, such as neurological dysfunction in the rear limbs, tend to decline in approximately one year after diagnosis and have a poor prognosis. Talk with your veterinarian to develop a proactive and comprehensive plan for your dog.

Management Tips

Consider providing:

- Easily accessible water
- Prescription diet foods to keep weight trim if pet is overweight
- Consistently measure meals
- Elevated dishes for larger pets
- Wet food to increase water intake

Try to:

- Be consistent with medications
- Track appetite, urination, drinking, weight, vomiting, diarrhea, energy, etc.
- Limit stress (kids, noise)
- Keep up with preventative care
- Address concerns ASAP
- Low energy activity and play
- Keep weight trim
- Keep cool in humid weather
- Never leave outside without shade or for prolonged periods in the heat
- Use pet sitters with medical experience or board at a hospital

Before your pet’s condition becomes unmanageable or they are losing quality of life, it is important to begin end-of-life care discussions. Learn about pet hospice care and/or euthanasia services in your area so you are prepared.