



Laryngeal Paralysis

Laryngeal paralysis is a condition of the larynx that occurs when the larynx muscles cannot properly function, and the larynx can not open wide enough to take a deep breath. The most common symptom of laryngeal paralysis is anxiety, stemming from the inability to get adequate oxygen. Anxiety causes rapid breathing, distress and potentially a respiratory crisis that may lead to death.

Laryngeal paralysis does not have sudden onset; most pets begin to show signs such as excessive panting, easily tiring on walks, voice changes or breathing loudly. Typically large-breed dogs are most often affected, especially Labrador retrievers. This condition is rare in cats.

Laryngeal paralysis has been linked to neurological and neuromuscular disorders, but it is not clear if there is a direct relationship between the two. It has also been suggested that there is a connection between laryngeal paralysis and hypothyroidism, but this is also not yet well understood.

The Diagnosis

To diagnose a dog with laryngeal paralysis, the dog must be sedated in order to examine the larynx. If the patient presents in respiratory distress, a diagnostic test may still be performed following the placement of a breathing tube in the animal's throat. Sedation is not required when a diagnosis is made with an endoscope via the animal's nostril, but this is a more complicated procedure that requires special equipment and patient cooperation.

Additional Testing

Some other tests may be helpful to diagnose or evaluate a pet with laryngeal paralysis. Chest radiographs are performed to confirm that aspiration pneumonia (inhalation of food into the lungs) is not present, as well as megaesophagus (an enlarged and stretched out esophagus) and tumors. Radiographs may also be done on the throat to identify any throat tumors. Blood testing, especially thyroid tests, should also be performed with any laryngeal paralysis diagnosis.

Respiratory Crisis

If laryngeal paralysis is not treated, a respiratory crisis may occur. The animal will try to inhale deeply in order to obtain more oxygen, and anxiety will occur because of its

inability to do so. This will cause the animal to continue to attempt heavy breathing, and a cycle of anxiety and deep breathing attempts will result. The laryngeal folds often become swollen during a respiratory crisis, which obstructs the airway even more. As the patient begins to suffer from lack of oxygen, its gums will become bluish and it will overheat. Fluid will then begin to pool in the lungs, causing the patient to drown.

If an animal enters a respiratory crisis, it must be sedated, intubated and cooled down with water. Intubation will allow the animal to breathe normally and oxygen may then be administered. Surgical intervention is often needed at this point to prevent further respiratory crises when the animal awakens.

Treatment

For milder cases of laryngeal paralysis, our veterinarian may prescribe anti-inflammatory medications. More serious cases will require surgery, which is performed by a board-certified orthopedic surgeon.

Laryngeal Tieback

This is one of the more common surgical methods; sutures are inserted so as to pull one of the arytenoid cartilages back and make the larynx opening larger. A complication of this procedure occurs when the arytenoid cartilage is moved too much and the larynx cannot close. Aspiration pneumonia may result in such a situation. If a patient were to experience this complication, symptoms would include a persistent cough after eating or drinking. The mortality rate of this surgery is lower, at approximately 14%.

Aspiration Pneumonia

Aspiration pneumonia develops in 25% of animals with laryngeal paralysis. This condition is treated with broad-spectrum antibiotics, fluid therapy and physical therapy, but it is difficult to resolve. Aspiration pneumonia may be prevented if intervention occurs at an early stage.

Source

Brooks WC. Laryngeal Paralysis. Veterinary Information Network, Inc. <http://www.VeterinaryPartner.com/Content.plx?P=A&A=2331>. Published 19 June 2006. Accessed 24 June 2016.