

Laryngeal Paralysis

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What is laryngeal paralysis?

Laryngeal paralysis is a disorder in which the nerves that control the muscles and cartilage that open and close the larynx (voicebox) do not function properly, causing voice changes and difficulty with eating or breathing. The larynx is located in the back of the throat. Air moves from the mouth or nose through the larynx, and into the trachea (windpipe). Normally, the laryngeal cartilages (also known as the arytenoid cartilages) are pulled open during breathing. In laryngeal paralysis, these cartilages do not open and close properly, making it difficult for the animal to take in air normally.

What causes laryngeal paralysis?

Laryngeal paralysis occurs most commonly in older, large breed dogs such as Labrador Retrievers, Golden Retrievers, Saint Bernards, and Siberian Huskys. Usually, the larynx is normal at birth, but over time, the nerves and muscles that control the laryngeal cartilages lose function. In most of these cases, the cause for this condition is unknown,

Less commonly, laryngeal paralysis can occur as a hereditary condition in puppies. In these cases, signs of breathing difficulty will usually be seen by 2 to 6 months of age.

Laryngeal paralysis can also be the result of damage to the nerves and/or muscles of the larynx due to a bite wound or other trauma. Sometimes laryngeal paralysis is associated with hypothyroidism. Laryngeal paralysis is rare in cats.

What are the signs of laryngeal paralysis?

The first sign of laryngeal paralysis is often a voice change: owners may report that their dog's bark sounds 'hoarse'. These animals make a lot of noise when they breathe in, and they may gag or choke when they eat. The signs are usually worse in hot and humid weather, during exercise, and in obese pets. The condition may become so severe that the animal cannot take in sufficient air: this can become a life-threatening situation.

How is laryngeal paralysis diagnosed?

With the dog under light anesthesia, a veterinarian examines the larynx. If an animal has laryngeal paralysis, the laryngeal cartilages will not open as wide as they should as the animal inhales.

How is the laryngeal paralysis treated?

In most cases, surgery is needed. The most common type of surgery done at a veterinary specialty center for this condition is a procedure called an 'arytenoid lateralization,' sometimes also known as a 'laryngeal tie-back' surgery. This involves putting one or

more permanent sutures in place to hold the arytenoid cartilage open so that adequate air can pass through. Most dogs do quite well after this surgery, although there is a small risk of bleeding during the surgery, aspiration (inhalation) of stomach contents during surgery, or aspiration of food and water after the surgery. The surgery is usually only done on one side, which provides increased airflow with less risk of aspiration.

If surgery is not an option, keeping the pet from breathing stress is very important. Dogs must be kept in a temperature controlled environment and kept calm. Your veterinarian can also prescribe a tranquilizer to use if the dog becomes too agitated or if there is a stressful event (i.e.; work on the house, travel or company) expected. If the dog starts panicking and having trouble breathing, an immediate visit to an emergency clinic is required.