Laryngeal Paralysis

What is it?
Ascending neuropathy affecting the recurrent laryngeal nerve. The muscles that hold the larynx open against air pressure when the dog breathes in become atrophied allowing the larynx to shut on inspiration. Rear limb weakness and megaesophagus is also associated with this disease. It is seen mostly in older Newfoundlands and Labrador Retrievers.

What causes it?
A neuropathy of the recurrent laryngeal nerve causes the inability of the muscles to function. Masses in the neck or chest that affect the nerve can also cause this.

Signs & Symptoms
Loud breathing on inspiration. Some dogs retch or cough randomly. Affected dogs have difficulty in the heat because they can’t pant. This can quickly become an emergency situation as the dog panics when it can’t pant, causing their temperature to rise and increasing their need to pant. The larynx closes down and the dog can’t breathe.

Testing & Treatment
How is it diagnosed?
Mostly by clinical signs. The breathing noise is classic. Formal diagnosis is by examining the laryngeal folds for lack of movement while the dog is just barely under anesthesia. Thoracic radiographs can diagnose masses.

How is it treated?
Laryngeal Paralysis can be managed by keeping the dog cool in the summer and not exercising them excessively. Usual treatment is surgery. The most common surgery is to “tie back” one of the laryngeal cartilages to allow for more airflow. Aspiration pneumonia is a possible side effect of surgery.

Prognosis:
Even with surgery on the larynx, the hind limb weakness is progressive until the dog can’t get up. Without complications, the tie back is generally very beneficial to the older dog with good improvement in their quality of life.

Breeding implications/genetics:
While a genetic basis is suspected, diagnosis is generally much later in life after a dog has produced offspring, so recommending not breeding isn’t very helpful.

More Information:
https://cvm.msu.edu/scs/research-initiatives/golpp