Prymak Referrals Limited

www.prymakreferrals.com

Laryngeal Paralysis Factsheet

What is Laryngeal Paralysis?

The larynx is normally pulled open on both sides when breathing in and relaxes when breathing out. In patients with laryngeal paralysis the muscles that normally pull the larynx open do not function properly resulting in the larynx becoming partially obstructed. There are several possible causes of laryngeal paralysis however the majority of cases seen occur in older dogs where the likely cause is thought to be due to a decline in nerve function associated with the aging process.

Signs and Symptoms:

The clinical signs seen with laryngeal paralysis include exercise intolerance, noisy breathing, coughing and gagging. You may also notice a change (higher pitch) or a loss of bark. These signs can be subtle to begin with and may even be attributed to 'old age' however as the laryngeal disease progresses the signs will become more apparent.

Many dogs with laryngeal paralysis show no signs at rest but signs are observed upon excitement or exercise. In advanced cases of laryngeal paralysis the patient can experience life-threatening respiratory distress caused by severe or even complete obstruction of the larynx. Dogs with laryngeal paralysis are also more prone to overheating in warmer weather due to difficulties which would normally help regulate the cooling process.

Diagnosis:

The breathing sounds associated with laryngeal paralysis are often very characteristic and can be recognised by an experienced veterinary surgeon however diagnosis of the disease requires visualisation of the larynx and observation of laryngeal movement during respiration. Visualisation can be achieved using sedation or anaesthesia however this can cause temporary changes in laryngeal function therefore an ultrasound examination performed with the patient conscious is ideal.

Larengeal Anatomy and Ultrasound

Laryngeal paralysis is usually seen in older dogs therefore blood tests and chest radiographs may be recommended to check for any signs of concurrent disease.

Treatment:

Patients presenting in acute respiratory distress require urgent attention. Treatment includes oxygen therapy, cooling, sedation and possible general anaesthetic with intubation and assisted breathing.

Permanent management of laryngeal paralysis can be achieved via the surgical procedure termed **Arytenoid Lateralisation,** more commonly known as **'Laryngeal Tieback'**. During this procedure an incision is made on the side of the neck and sutures are placed to permanently secure the larynx in an open position. The 'tieback' is usually unilateral (one side only) as bilateral (both sides of the larynx) tiebacks are associated with increased complications.

Aftercare and Prognosis:
All surgeries carry some degree of risk. This can be minimised by having an experienced surgeon perform the procedure.

The most significant complication associated with laryngeal tieback surgery is aspiration pneumonia due to a risk of liquids or food entering the airway. To minimise this risk a feeding plan may be recommended for the first 2-3 weeks post-surgery. This may involve hand feeding or using an elevated feeding platform and feeding chunky pieces of soft food (food can be rolled into 'meatballs'). Crumbly, flaky and liquid foods should be avoided during this time. If no complications arise then other foods can begin to be slowly introduced.

Other possible complications include infection of the surgical wound, formation of a seroma (a build-up of fluid under the incision site), occasional coughing during or following eating and drinking and breakdown of the tieback sutures resulting in a return of the previous signs requiring re-operation.

Following surgery it is also advisable to minimise barking for approximately 6 weeks (avoid situations known to influence barking), use a harness rather than a neck collar and implement a weight loss program for patients carrying a few extra pounds (this has many other benefits too!).

Following full recovery from surgery many owners report a vast improvement in their pets breathing and therefore an improvement in the pet's quality of life.