

## TIE-BACK for Laryngeal Paralysis

Your vet has arranged for me to see your pet for a surgical procedure called a “Tie-Back” or more accurately *Arytenoid Lateralisation*. This operation is performed to treat the condition “Laryngeal Paralysis”

Laryngeal paralysis typically occurs in older larger-breed dogs (typically Labradors and Spaniels, although many breeds can be affected). The problem is that muscles within the voicebox, which should function to open the voicebox up during breathing, fail. This means that the opening at the back of the throat for breathing is smaller than it should be. Most of the time this doesn’t cause a problem, but when the dog tries to exercise, or becomes stressed or hot, then they cannot increase their breathing sufficiently.

Laryngeal paralysis can cause a reduction in exercise tolerance, so you may have noticed your pet “slowing down” on walks. It can also cause a life-threatening breathing crisis. There is usually a characteristic “rasping” noise (“stridor”) when your dog breathes in. Typically the bark changes (this is very characteristic), and you may also have noticed your dog coughing.

The diagnosis is often clear from examination and history alone. A definitive diagnosis is often slightly more tricky. Ideally, we observe the larynx directly and see that there is no movement. However, this requires sedation, and all sedative drugs may themselves affect the movement of the larynx (“false-positive”). Generally, we are extremely suspicious of the condition based on the history and examination, and as long as laryngeal examination doesn’t contradict this then we are happy to proceed with surgery.

We will generally have asked your vet to get some chest x-rays of your pet prior to surgery. This is to rule out some rare causes of laryngeal paralysis (masses in the chest), and also to check whether there is any evidence of pneumonia before surgery. We know that it’s not usually a good idea to operate if pneumonia is already present, so if this is identified we will generally suggest a course of treatment and some further x-rays before proceeding with surgery.

We cannot restore the function of the muscles, so the best treatment for this problem is to hold the larynx in a semi-open position with stitches to improve the breathing. Unfortunately, because the larynx should also normally close during swallowing, holding it open does create a risk that your dog will inhale food. In some cases this can cause *aspiration pneumonia*. To minimise this, we only hold one side of the larynx open, and we aim to open the larynx only a moderate amount. We also give you some advice about feeding to help minimise aspiration.

The surgery is performed from outside the larynx, via a skin incision on the side of the neck on the left side. The surgery normally takes between 60 and 90 minutes.

Under normal circumstances we will try to get your dog home to you the day of surgery. It is normally better for them to recover calmly at home than to be in the hospital where they may be stressed or agitated. However, if you are concerned about their recovery at any stage you may need to come back to the practice quickly.

The main risk after surgery is aspiration pneumonia. This usually shows up as your dog becoming ill (quiet, off-food), having a temperature, and a soft/chesty cough. Usually aspiration pneumonia will respond to a course of antibiotic treatment, but occasionally it can be serious and life-threatening.

Surgery in the neck also carries an increased risk of a fluidy swelling in the area (“seroma”). This usually resolves over a few weeks. This may be helped by applying warm compresses to the area. We would generally avoid draining a seroma if at all possible as they usually just reform, and this increases the risk of infection.

There is a small risk associated with a general anaesthetic. Your vet may discuss with you whether you would like your dog to have a blood test prior to surgery to ensure that there are no underlying health problems that we were unaware of.

Thank you for entrusting the care of your pet to us, and I look forward to speaking to you on the day of the procedure.

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RCVS Advanced Practitioner in Small Animal Surgery**