**Recurrent Laryngeal Neuropathy (RLN)**

This is a disease condition that comes as a result of gradual or sudden degradation/damage to the nerves supplying the muscles of the larynx. Consequently, the muscles are unable to adequately to open the larynx (usually via the left arytenoid cartilage) to permit the smooth flow of air on inspiration and expiration. This causes a decreased amount of air entering the lungs and a lowered degree of oxygen delivery to the lungs that is sufficient to supply the body, particularly the muscles of high-performing horses e.g. racehorses, working horses.

**Causes:**

* Genetic pre-disposition of horses that encounter RLN i.e. horses (more so stallions) suffering from RLN passing on the trait to offspring
* Direct damage to the recurrent laryngeal nerve via severe trauma
* Compression or stretching of the recurrent laryngeal nerve, as it has a considerably long path to the larynx. This can take place due to space occupying lesions like haematomas and neoplastic growths and sudden hyperextension of the neck.

**Clinical Signs/Diagnosis:**

Before assessing horses presenting with potential RLN, a thorough history must be taken. This could potentially reveal any extrinsic or intrinsic factors that may have led to the pathology e.g. the patient’s sire having a history of RLN, the horse suffering severe trauma in the neck region. The neck region is also to be palpated for any loss of musculature. RLN is characterised by a harsh whistling or roaring sound (horses affected by this condition are often called ‘roarers’).

Furthermore, due to the impinging of the arytenoid cartilages on the patency of the larynx and the decreased ability to adequately respire during intense physical activity, the horses show signs of exercise intolerance and/or decreased athletic performance. To assess respiratory effort, the nostrils can also be obstructed to determine the severity of the condition. Abnormally lower racing times may be also be recorded in affected horses.

Endoscopy provides a means of visually assessing the patency of the larynx, the degree of obstruction occurring and symmetry of the arytenoids.