LARYNGEAL COLLAPSE – CAN WE SAVE ANY OF THEM?
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Laryngeal dysfunctions are common in dogs and two main diseases are encountered.

**Laryngeal paralysis (LP):** is a condition that affects primarily older medium to large breed dogs; recent evidence suggests that the idiopathic form of the disease may have an underlying chronic progressive neuropathy. LP results in obstruction of the rima through failure of arytenoid abduction during inspiration.

Management is directed towards permanent enlargement of the rima, usually by unilateral arytenoid lateralization; the prognosis is universally favorable in experienced hands.

**Laryngeal collapse (LC):** is a commonly encountered feature of many brachycephalic dogs in which turbulent airflow and abnormally-negative pressures in the lower respiratory tract or abnormal cartilage structure can initiate a progressive and degenerative sequence of events within the upper airway which eventually result in obstruction of the rima. In the early stages of the condition the mucosal lining of the larynx and pharynx become edematous and chronically thickened. This process also involves the mucosa within the laryngeal ventricle and the saccules are consequently forced to evert into the ventral rima. As the condition progresses the laryngeal cartilages begin to lose their rigidity and collapse towards the rima. The leading and lateral edges of the epiglottis roll inward and the cartilage folds dorsally towards the glottic opening. The weaker regions of the arytenoids, including the cuneiform processes, collapse medially drawing the corniculate processes with them. The rima is progressively narrowed by these processes and in the final stages is completely occluded. The early changes involving the saccules and pharyngeal tissue are often reversible and may be resolved by prompt management of the underlying problem.

Management is considered to be extremely challenging once the changes involve the cartilages which are more permanent. Surgical interventions (vocal fold resection, arytenoidectomy, arytenoid lateralization) in these patients are consistently unsuccessful and the prognosis for LC is considered to be guarded to poor.

**Laryngeal paralysis / laryngeal collapse (LP/LC):** is a third, less commonly encountered syndrome of paralysis combined with collapse has been described affecting the larynx of small non-brachycephalic breeds. The etiology of the condition is not clearly understood; there is no evidence that neurological disease or abnormalities of airway conformation are involved in any way. Laryngoscopy reveals bilateral failure of arytenoid movement with bilateral medial folding and contact between the cuneiform processes; there is no indication of eversion of the laryngeal saccules in these patients.

Management by arytenoid lateralization is usually successful; the prognosis is therefore good for this smaller group of dogs with laryngeal collapse however, a staged bilateral procedure is necessary.

References

Arytenoid lateralization for management of combined laryngeal paralysis and laryngeal collapse in small dogs.
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