

# PROGNOSIS OF DIFFERENT RECURRENT LARYNGEAL NEUROPATHY (RLN) TREATMENT

Prosthetic laryngoplasty is far from ideal as a treatment for RLN but it remains the best practicable option currently available. Refinements are required to provide consistent and enduring abduction without dysphagia. Although it is recognized that this surgery can produce complications in the forms of coughing, nasal reflux of ingesta or recurrence of dyspnoea, the risks are justifiable in horses which cannot otherwise be effective athletes.

Nerve/muscle pedicle grafting is a potential alternative, but its application is most likely to be limited to horses where RLN is confirmed at an early stage and when the prolonged convalescent period is less restrictive.

Functional electrical stimulation of the recurrent nerve using an implanted stimulator with an external control unit is a novel approach suggested as a future potential remedy for RLN.

Ventriculectomy or ventriculocordectomy performed alone has less risk of complications than these procedures performed in conjunction with laryngoplasty.

However, there is evidence that combining ventriculectomy or ventriculocordectomy with laryngoplasty neither prolongs the life of the surgery nor improves upper airway flow mechanics.

Therefore, the primary goal of surgery in the performance and show horse is to eliminate the respiratory noise caused by laryngeal hemiplegia rather than to reduce the airway obstruction. In a recent study, it was shown that bilateral ventriculocordectomy effectively reduces inspiratory noise in laryngeal hemiplegia-affected horses by 90 days after surgery. Conversely, it was shown that laser vocal cordectomy does not effectively reduce the noise associated with laryngeal hemiplegia by 120 days after surgery. Both of these techniques modestly improve airway flow mechanics, but bilateral ventriculocordectomy is the treatment of choice for noise reduction. Clinical experience suggests that bilateral standing ventriculectomy has a very similar result in draft breeds, decreasing airway noise while improving air flow mechanics.