

# EPIGLOTTIC ENTRAPMENT IN THE THOROUGHBRED RACEHORSE

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**UPPER AIRWAY DISEASE IS SECOND ONLY TO LAMENESS  
AS THE MOST SIGNIFICANT PERFORMANCE-LIMITING  
CONDITION IN THE RACEHORSE.**

**T**he conditions of the upper condition can be dynamic, changing as horses grow and develop, as well as manageable with tack, conditions, and fitness. The epiglottis is a triangular shaped cartilage that is positioned in front of the larynx and sits above the soft palate. In normal function, the epiglottis acts to divert food from the oral cavity to the oesophagus during swallowing, guarding the larynx.

Epiglottic entrapment occurs in up to 3 per cent of horses with airway obstruction, when the loose tissue beneath the epiglottis (subepiglottic mucosa) finds itself positioned over the cartilage, interfering with normal airflow and function.

## DIAGNOSIS OF EPIGLOTTIC ENTRAPMENT

The most common clinical signs in the thoroughbred racehorse is poor performance and airway noise. These horses

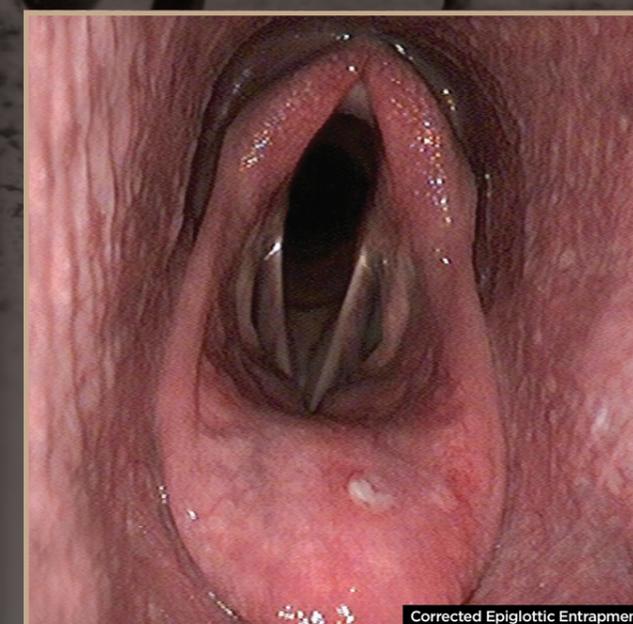
are not always intolerant of exercise and the findings can be incidental. Fillies and mares have more frequently been found with the condition than their male counterparts.

The diagnosis of epiglottic entrapment

**HORSES WITH MORE COMPLICATED EPIGLOTTIC ENTRAPMENTS THAT REQUIRED TISSUE TO BE REMOVED (25 PER CENT), RACED FEWER TIMES AND EARNED LESS MONEY THAN COUNTERPARTS.**



Epiglottic Entrapment



Corrected Epiglottic Entrapment

is straightforward and made definitively by endoscopy (scoping) at rest. Endoscopy can easily identify the condition and further diagnostics are infrequently required. The majority of epiglottic entrapments in the racehorse are persistent (97 per cent) with many thickened and ulcerated by the time a diagnosis is made.

## TREATMENT OF EPIGLOTTIC ENTRAPMENT

Multiple options exist for treatment of epiglottic entrapment from short standing to short general anaesthetics, with minimal differences in outcome observed. Historically, the most commonly used technique by surgeons has been the use of an oral bistoury under a short general

anaesthetic. Although this technique has been performed with minimal complications for many years, the advocacy for standing surgical procedures has led to an increased popularity for standing laser transection. Other variations in technique such as a standing trans-nasal bistoury have also been used with good success.

## PROGNOSIS

The outcome for an epiglottic entrapment in the racehorse returning to work is typically good to excellent. A recent report on cases in the United States from 2007-2013, found the majority of treated horses had overall career earnings similar to their untreated counterparts. Treated horses however, performed less successfully (earning and

starts) in the first three months after surgery.

Horses with more complicated epiglottic entrapments that required tissue to be removed (25 per cent), raced fewer times and earned less money than counterparts. Variations of epiglottic entrapment occur and these can include partial entrapment, epiglottitis (infection), granulomas, sub-epiglottic cysts, epiglottic hypoplasia (small epiglottis), and epiglottic retroversion; all of which can complicate a diagnosis and treatment plan.

In summary, epiglottic entrapment has a good-excellent prognosis for return to racing and performance after surgical correction. Fillies and mares may encounter the problem more frequently; and complicated cases may lead to horses ending their careers sooner. ■