DECISION MAKING IN EPIGLOTTIC DISEASE
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The epiglottis is often considered a fairly inconsequential bit of cartilage in the upper airway that sometimes develops problems and has associated expectations of an easy remedy. Yet, its importance is usually underestimated, and many competitive horses have career ending problems associated with their epiglottis. This is likely in part due to an incorrect diagnosis, in part to due to inappropriate treatment, and in part due to a lack of recognition of the complexity of the problem and healing. Decisions at each juncture are critical to the outcome.

Judgments on epiglottic abnormalities start and end with the resting examination. One of the most important things to recognize is that the structural appearance of the epiglottis is very much dependent upon its position within the nasopharynx. If it is rostral and dorsal within the nasopharynx it will stand off the palate and have a nice downward curve toward the tip. If the epiglottis is caudal and ventral within the nasopharynx it will look very flaccid on the floor of the palate. This apparent change in structural integrity can take place in minutes, and thus care should be exercised about being overcritical of a hypoplastic epiglottis. Furthermore, while trends exist, a horse with small epiglottis can perform well and a horse with a very robust large looking epiglottis can still displace its palate.

The most common epiglottic abnormality is entrapment. Entrapments can be intermittent in nature, have thin unulcerated membranes, or thick and ulcerated membranes. The normal contour of the epiglottis within the membrane may be easily discerned or obscured/deformed. It is the latter group that is most concerning relative to the prognosis because a “flattened” tip is indicative of a tip that is rolled back into the entrapment and even with resolution of the entrapment, the deformation of the cartilage may persist.

After recognition of an entrapment, the next question is does it require surgical treatment? Entrapments by themselves cause little respiratory obstruction and most surgeons know of horses that have raced well with an epiglottic entrapment. So what is it that makes them not race well? It is most likely the association between entrapment and displacement. The secondary intermittent displacement of the palate will result in dramatic respiratory compromise and poor performance. So while horses can race well with entrapments alone, if the entrapment is resulting in displacement, the entrapment should be treated. Furthermore if the entrapment is left in place for an extended period of time because the horse is still competing well and there isn’t a good opportunity to take the horse out of work, the risk of permanent epiglottic deformity increases.

It is fairly well accepted axial division of the entrapping membrane is the surgical treatment of choice. How the division is performed and whether any tissue is resected is still debatable. While some clinicians advocate laser division, others prefer a blade. Laser division is preferred by this author since the division is done gradually rather than with one cut, and risk of reentrapment can be assessed. Tissue resection may minimize the risk of reentrapment but likely lengthens postoperative convalescence. Subepiglottic endoscopic evaluation is valuable to determine the length of the convalescence period.