

Breathing Easier: Videoendoscopy Helps Diagnose Airway Disorders

Like human athletes, equine athletes are required to be in near-perfect condition to meet the demands of high-intensity activity. The ability to breathe well is one of the most critical functions for race and sport horses, but upper airway obstructions such as laryngeal hemiplegia (more commonly known as “roaring”), hamper the horse’s ability to do so. This condition occurs when the left arytenoid cartilage in the horse’s larynx loses function and blocks the airway. Fortunately, equine surgeons at the school’s veterinary hospital are skilled at performing prosthetic laryngoplasty (“tie-back”) surgery to correct this problem.

To diagnose upper airway obstruction or other upper airway respiratory disorders, UC Davis veterinarians use static and dynamic videoendoscopy to make an accurate diagnosis. One of the added benefits of utilizing this new technology is being able to exercise the horse in its normal environment, such as a track or an arena rather than on a treadmill, which can be dangerous and frightening for inexperienced horses. The YouTube video “UC Davis Equine Videoendoscopy” shows how horses are instrumented with a dynamic videoendoscopy system and then exercised while a live video feed is transmitted to a monitor for clinicians to view laryngeal function.



◀ Handsome was back to competing better than ever after successful “tie-back” surgery.

Handsome, a 16-year-old Thoroughbred gelding, recently underwent “tie-back” surgery after videoendoscopy was used to diagnose him with left laryngeal hemiplegia. His left arytenoid cartilage was completely paralyzed and was partially (and at maximal effort almost completely) obstructing his airway.

After successful surgery, Handsome was discharged the following day with the expectation of returning to full performance after just a few weeks of convalescence.

“Handsome is breathing and performing much better,” said his owner Nancy. “After surgery, he found he could run and breathe at the same time—we actually couldn’t catch him, he was so excited. When he was conditioned enough after surgery, my daughter had him back to jumping three feet six inches with ease. We cannot thank UC Davis enough for everything the team did for him and my family.”

To see the procedure in action, view the “UC Davis Equine Videoendoscopy” video on YouTube.