

The Cornell Collar®

The Cornell Collar is designed to prevent **dorsal displacement of the soft palate (DDSP)**. This is a common condition of racehorses causing upper airway obstruction and poor performance. The correct term is actually **intermittent DDSP (IDDSP)** as affected horses are asymptomatic at rest and only show exercise intolerance during high-speed exercise.

The aetiology of **IDDSP** is still undetermined although it appears to be multi-factorial.

The **diagnosis of IDDSP** is frequently based on the horse's history of making a noise (although about 20% are silent displacers) during exercise and reduced performance. Standing endoscopy alone is rarely diagnostic but can be useful in identifying upper airway changes characteristic of **IDDSP**.

A definitive diagnosis may only be made during upper airway videoendoscopy on a high speed treadmill. However, even under these conditions, not all horses will displace their soft palate and the diagnosis can only be based on history.

The **Cornell Collar®** comprises a lifting mechanism that fits up between the jaws of the horse, supported by a leather strap passing in front of the ears and pulled forward by a cross-over nose band. The lifting mechanism lies immediately behind the basihyoid bone (see figure 2) preventing the larynx from retracting backwards. This prevents the palate from displacing.

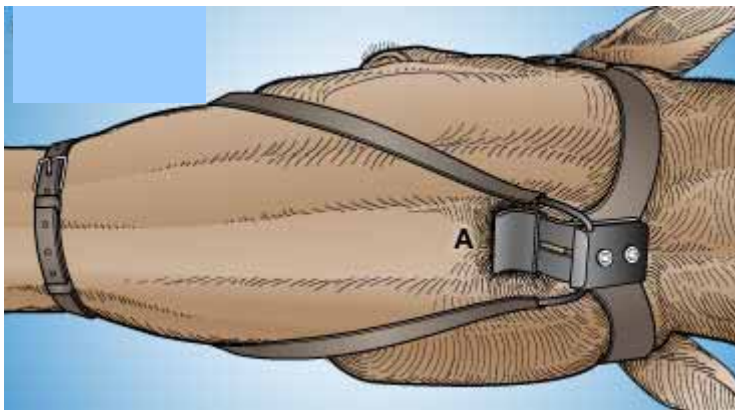
Figure 1: The Cornell collar (TSDII) correctly fitted





Note the cross-over nose-band and cheek straps that form part of the normal bridle.

Figure 2: The lifting mechanism sitting correctly behind the basihyoid (A) bone between the jaws



There are currently two models available:

- The TSD I that does not have the cheek straps for attaching to the bit; and
- The TSD II (shown above) that has cheek straps that attach to the bit, incorporating the collar into the bridle.

Treadmill studies have shown the Cornell Collar® to be over 90% effective in preventing DDSP. No adverse effects of the collar were observed.

Australian Perspective

The Cornell Collar® has been nationally approved by the Australian Racing Board and the Australian Harness Racing Council.

The RWVA conditions for its use are that:

- The trainer must submit to the Stewards a letter from a registered veterinarian stating that the use of the Cornell Collar is justified and appropriate in the given horse.
- The horse must complete a barrier trial wearing the Cornell Collar, to the satisfaction of the Stewards, before being permitted to race in this gear.
- A stable return must be lodged listing the Cornell Collar as gear to be worn on race day and this advice should appear in the race book for the public, in a similar manner to blinkers.
- The official racecourse veterinarian must inspect the horse pre-race to ensure the device has been correctly fitted.
- If the Cornell Collar is to be removed as part of a horse's gear then the Stewards must be advised both by stable return and a letter which details the reasons for discontinuing with this gear.

Dr David J. Murphy of Murdoch University is eager to assist Australian racetrack veterinarians and stewards so that they can correctly fit the collar and thus to assist trainers to fit the collar correctly.

For assistance on any aspect of the Cornell Collar contact him on 0404-007674(mob), (08) 9360-6317 (w) or via e-mail at vetaireaustralia@bigpond.com