

DENTAL MANAGEMENT OF HORSES

By HRV Veterinarians Dr Lesley Hawson and Dr Nick Branson

Do you see undigested food in your horse's manure or is the manure runny and smelly? Does your horse pull or lug to one side? Have you ever had a horse develop a heart murmur? Read on to find out how all these conditions can have a common cause?

Just like us horses have a limited amount of teeth tissue, so their teeth just wear out after the age of fifteen. And again, like humans, it is how their teeth are managed when they are younger that determines their dental health when older. Horses even develop all the same dental problems as we do, from caries and broken teeth to gum disease (see Figure 1)! Research suggests that as many as two thirds of horses will be experiencing dental problems leading to pain at any one time. Younger horses (less than 6 years of age) and older horses (over 15 years of age) are more vulnerable. The teeth of foals and young horses are softer while older horses will develop brittle or diseased teeth that break and infections in the tissue around the teeth.



Figure 1: Infundibular necrosis caused by dental caries. It is important to identify these problems before the bacteria involved enter the blood stream and cause profound health compromise. *Picture taken from: Hammar, E.J., 2022. Dental malocclusion in horses and the effect on the metabolism.*

The horse's evolutionary niche as a trickle feeding prey animal means that horses don't show any overt behavioural changes in its eating behaviour although the affected horse will often show facial expressions consistent with pain (see Figure 2). Reluctance to eat, behaviour changes around the bit and biting, smelly breath, or dropping feedstuffs when eating are all indications of possibly severe dental disease and should be immediately investigated. Any horse that has problems maintaining adequate body condition must have a thorough dental exam as part of the workup by your veterinarian.

Other disease states that can arise out of dental problems include:

- Misbehaviour due to pain (see Figure 2)
- Infertility
- Respiratory disease
- Heart disease
- Choke and colic

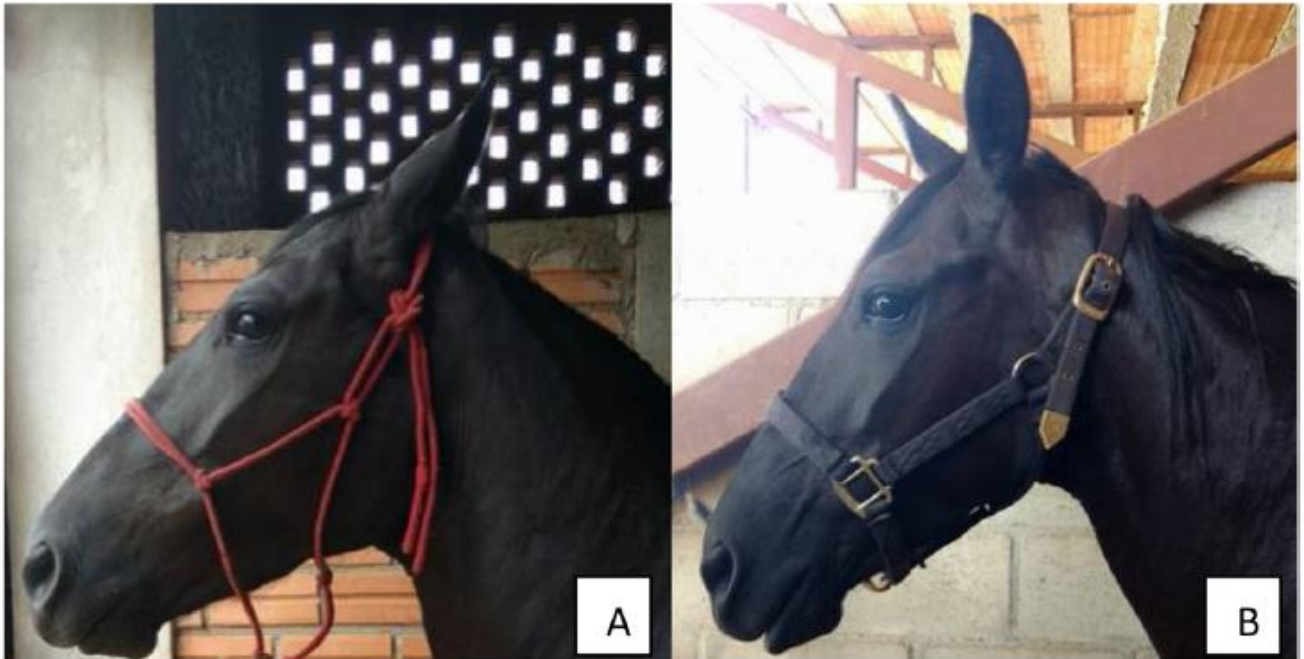


Figure 2: Photograph of the same horse before treatment (A) and 15 days after treatment. In image A, the animal has moderately held its ears stiffly backwards, slightly stretched mouth with pronounced chin, and moderately stretched nostrils. In image B, the animal has a relaxed facial expression. *Taken from:* Coneglian, M.M., Borges, T.D., Weber, S.H., Bertagnon, H.G. and Michelotto, P.V., 2020. Use of the horse grimace scale to identify and quantify pain due to dental disorders in horses. *Applied Animal Behaviour Science*, 225, p.104970.

The horse's tooth roots are very long. They lie close to the wall of the respiratory passages. Any infection in the tooth can spread through the surrounding tissue and create infection in the respiratory system. Problems like this can cause poor performance in the racing animal. Any infection in the soft tissue around the teeth also gives bacteria access to the blood stream. The bacteria will travel to other parts of the horse's body including the reproductive system and, commonly, the thin leaflets that make up the valves in the heart. Here they create nodules of abnormal tissue that ultimately lead to scar tissue that prevent the valves closing properly. This creates leakage in the heart which we can hear as a murmur. The leaky valves reduce the cardiac output. Again, this is not desirable in a racehorse which needs all the physiological systems operating optimally.

A complete dental examination requires that the horse be sedated, and all aspects of the teeth be inspected with a combination of a light and dental mirrors. It is especially important to inspect the big molars at the back of the mouth. These teeth can develop sharp edges that lacerate both the cheeks and the tongue especially when rein tension causes the bridle and bit to press the cheeks against them. These sharp edges are often found in horses that lug or show blood in their mouths after work from lacerations to the cheek or tongue tissues.

Only a veterinarian can sedate your horse for a dental examination, contact your local equine veterinarian to find a suitable equine dentist and discuss your horse's needs.

To find out more about what your horses may need, click the following link:

<http://advancedequinedentistry.com.au/how-old-is-your-horse/>