

EQUINE DENTISTRY FOR PERFORMANCE HORSES

Assessing incisors pre-treatment



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Shirley originally trained as an Equine Dentist with her father 20 years ago while she was working as a Veterinary Technician at New Zealand's Veterinary School at Massey University. Shirley completed a New Zealand Certificate of Science in Biology while working at Massey. After 17 years at Massey she left to attend the American School of Equine Dentistry in 1999 and has been fulltime as an Equine Therapist since then. Shirley is dual qualified in Equine Bowen Therapy with EMRT (AUS) 2002 and EBT (UK) 2007. She has completed four Equine Craniosacral courses with Maureen Rogers from the US.

Performance horses are expected to maintain a perfectly steady head carriage while performing, while accepting the bit/bits and showing no resistance. All this is impossible to attain if the teeth are sharp, unlevel and creating inflammation, pain and imbalance. Horse's teeth continually erupt throughout their lifetime which is why your horse should have a regular visit from a professionally trained equine dentist at least yearly, or six-monthly if your horse is a performance athlete.

In nature, the horse grazes for a large part of the day, dining on rough forage that helps to keep it's own teeth in check. With domestication comes a lot of factors that are detrimental to optimal dentition, which then affects performance.

Horses develop sharp points on the outside of the top cheek teeth and the inside of the bottom teeth, which can lacerate the cheeks and tongue, creating pain. Floating these points is the basic job of an equine dentist to increase mouth comfort. Eating soft grasses or processed feeds can result in a smaller chewing pattern than desirable, creating sharp



edges. Pain from the sharpness then reduces the lateral excursion of the jaw even further. The bridle will aggravate the ulcers and the horse may toss or tilt its head, or just be unsteady.

The use of a bit in the horse's mouth creates a backward force upon the lower jaw (mandible) starting a mis-alignment that can encourage the development of hooks usually on the first upper premolar and the last lower molar. This also affects all the soft-tissue around the jaw joint (Temporo mandibular joint or TMJ) creating pressure and pain. **This is made worse when the rider has hard hands, pulling backwards on the horse's mouth.**

When the jaw is out of alignment, other problems may develop in the mouth such as excessive transverse ridging or ramps. The incisors may be affected becoming curved or slanted instead of level. The upper and lower incisors should not be overlong and should be aligned in the centre. If the lower jaw is off to one side, or the incisors are overlong, then the horse will have TMJ pain.

A speculum (gag) should always be used when performing equine dentistry so that the whole mouth can be observed and assessed. The occlusal or biting surface of the teeth needs to be level, but not smooth. Nature has created infolding of the enamel to create a roughened chewing surface which should not be oversmoothed by files or power-tools. The quality of grind should always be checked post dentistry to ascertain freedom of movement of the jaw and the depth of grind.

It is very important to feed horses off the ground as opposed to a raised manger and to offer lots of hay. The horse has been designed to eat for long periods of the day with the head down and the lower jaw forward. Yarding and stabling, with therefore reduced grazing, means the horse isn't chewing for as long each day which can cause overgrown teeth. Eating with the head up has a different jaw alignment which can also lead to hooks developing. Research has also shown that eating from a raised manger puts the horse into the sympathetic system which is associated with 'flight or fight' and may contribute to the occurrence of stomach ulcers. Hay provides the



necessary bulk that is essential for mastication and to keep the hind-gut full.

Horses have small vestigial premolars, called wolf teeth, that sit usually on the upper jaw just in front of the first cheek tooth where the bit sits but can be found anywhere on the bars and in some cases elsewhere in the mouth. A horse may have 1 or 2 wolf teeth and sometimes up to 4, or may have none at all. Wolf teeth commonly cause head tossing and bit evasions and are best removed if they potentially may cause a problem with the bit.

Professionally trained equine dentists will round the first cheek tooth on each arcade into a 'bitseat' which is essential for all bitted horses. This shaping removes the sharp corner which can ulcerate the corners/cheeks if they become trapped between the bit and the tooth. The bitseat increases the comfort when bitted and should be mandatory for bitted horses. The dentist is also able to check bit fit and tell you about the shape of the inside of the mouth and comment



on bit suitability. Many horses find the 'nutcracker' action of a snaffle uncomfortable as it may hit the roof of the mouth.

The jaw is the largest pattern-setter of the body. Any imbalance here is reflected elsewhere in the body such as lack of freedom in the forequarters, inability to bend evenly, bridle-lameness and irregular gaits. Tight nosebands serve to lock up the jaw, further restricting movement and potentially creating cheek ulcers where they press against the teeth.

Ideally horses should first see the dentist between the ages of two and three or before they are started. Horses start teething at 2.5yrs and this finishes at around 5 years resulting in a few years of pain in his mouth from losing caps and developing permanent teeth.

If your horse has been neglected in his early years and already has advanced dental problems he may need to receive Equine Bowen or Craniosacral Therapy to relieve any soft-tissue pain or tension that has resulted and can remain after dentistry has corrected the initial problem.

Many performance horses carry the look of pain in their eyes which can be alleviated with the correct therapy choice.

Equine Dentistry should be part of routine care for all horses whether they are show competitors or paddock ornaments and is essential for the athlete aiming for optimum performance. Prevention of dentistry problems is better than trying to correct a long-standing issue and will save you money in feed bills in the long term.