



## Q&A FROM A HORSE DENTIST

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### Case History, Missing Tooth Cause of Pathology

**Case History:** Tara, is a 14 year old bay, quarter horse mare, used as a lesson horse at a popular equine training/riding facility. She was reported to have behavior problems when handling her on the ground such as, pushy, high headed, lack of respect while on a lead.



Tara is housed in a pen with 5-6 other mature horses. She continually eats good quality free choice hay. She is aggressive toward the other horses, especially when oats are provided. She goes to great lengths to clean up every other oat pile and is routinely found on her knees and reaching under the bottom rail in order to get every oat that lands on the outside of her pen.



**Evaluation/observations:** Upon initial evaluation, Tara's teeth do not appear to be in that bad of condition. Upon further evaluation we find that Tara is notably overweight, with an extended (hay) belly. A stool sample reveals long stemmed partially chewed hay and whole oats with the hull still intact.

The exam affirms numerous dental abnormalities. The mouth emits a foul odor, smile mouth, missing incisor, incisors out of alignment, overgrown incisors, domed out molar tables and a severe wave.



Tara's missing an upper left incisor (2-3) of which we have no history to confirm the cause. The two possibilities are as follows: (1) the permanent tooth loss caused the opposing tooth to hyper-erupt. The hyper-eruption put pressure on the upper incisor arcade forcing the upper incisors to shift out of alignment, offset from the lower arcade. (2) The realignment of the entire upper arcade may suggest the tooth loss happened between 4 to 6 years of age, therefore allowing the upper arcade to realign as they erupted. The incident had to have happened at least 2-3 years ago to facilitate that much pathology. Regardless of when or how the incisor arcade misalignment occurred, the five upper incisors are cradled by the six lower incisors. The misalignment of her incisors over time, prevented the jaw from freely sliding side to side

causing her to chew in an up and down fashion, doming out the upper molar tables and changing the table angle.

The sour smell coming from her mouth came from impacted, rotten feed caught between her teeth caused by chewing up and down, forced feed particles to wedge between her teeth and gums. The overgrown incisors and the smile mouth would make it difficult or even impossible for Tara to chew her feed properly.

Her physical condition was explained by Tara's inability to chew her feed properly leaving her to feel hungry. Horses that are unable to chew their food up completely before they swallow have voids in their system caused by large particles of unchewed food. The voids in their system cause the horse to feel hungry all of the time, therefore needing to eat constantly, never quite feeling satisfied. Providing Tara with free choice hay allowed her to eat continually, filling her gut with large quantities of partially chewed hay. The extra feed, gave Tara what some refer to as a hay belly.

Dentistry significantly reduces the amount of food required for proper growth and maintaining good health. Regular dentistry ensures that the teeth are properly grinding all the feed we provide our horses therefore allows the feed to properly process and pass evenly through their system. Some clients have reported a significant savings in feed quantity while maintaining or improving condition on free choice hay. When horse's teeth work properly to grind their food efficiently, good nutrition is a result. Good nutrition therefore provides for better health. Healthy horses in turn have stronger hooves, a better coat and a stronger resistance to illnesses, and so on.

One of the first things we are taught to look for is external indicators of compromised dentition. An indicator of dental problems is aggression around feed. If several horses eat together, as in Tara's situation, you may notice the fat, get fatter and the thin, get thinner because of the aggression of a few. Horses that are aggressive around feed can be in the most pain. Teeth in poor condition cause a horse to take longer to eat therefore driving off others provides them with the comfort of knowing their food source is well protected.

Another external indicator of poor teeth are horses said to be the ones that never leave the feed trough. Horses with poor teeth are unable to chew their food up completely before they swallow. This allows large particles of feed to enter their system. These large particles cause voids in their system making the horse feel continually hungry. This causes two things. First, a horse that is never satisfied feel like they need to continually eat. Second, a horse that can't grind his food up completely needs to eat more than he would normally require since he is only grinding up a portion of each mouth full therefore allowing his body to only get nutrition out of a portion of every mouth full. On the flip side, if a horses teeth are working together properly, they grind every bite of food they eat into very small particles before they swallow, providing 100% access to the nutrition provided. Many horse owners find significant savings on their feed bill when their horses teeth are routinely equilibrated.

It is not always the thinnest horses that have the worst teeth. Thin horses may not be as competitive for their food. It may be said that the horse in the best condition, may have the worst teeth.

Remember, all undesirable actions are compensatory to any point of pain and attributes to a horse's balance and ability to perform. If you are experiencing undesirable behaviors while riding your horse, have a certified equine dentist take a look, to get the answer *'straight from your horse's mouth'*.

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If you have a question about your horse's teeth and how they might relate to his health or performance call 1-306-763-0386, 1-403-936-5394, 1-208-420-2701 or e-mail [mackequine@sasktel.net](mailto:mackequine@sasktel.net).