



Q&A FROM A HORSE DENTIST

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BUYER BEWARE!

I am often asked to perform, *Pre/Post-Purchase Equine Dental Examinations*. While doing so I confirm healthy well maintained teeth, identify abnormalities and oral injuries as well as confirm the age of the horse. Many are surprised when I've identified dental concerns when the horse looked perfectly normal in the sale ring. With the ever growing interest in the horse dental industry and the recognition of it's importance, pre/post-purchase equine dental examinations are becoming more common place.

Recently, I reviewed a case history of a three year old quarter horse stallion that suffered severe trauma to his mouth. I bring this to your attention specifically because of the owners initial request: "*to make the incisors more presentable for sale*".

A brief case overview: the oral injury resulted in the extraction of all seriously displaced and irreversible damaged incisors along with the removal of small portions of non-healed fractured bone. The stallion will have a permanent deformity, although should not be visible unless his lips were moved out of the way for examination, leaving the horse in otherwise good shape when looked upon however, diligent dental maintenance will be required for the remainder of his life. (The complete case evaluation, treatment and prognosis is re-printed in the accompanying box.)

In the horse world, accidents happen. Foals get kicked, runaways have been known to head

CASE HISTORY ORAL INJURY CAUSING DEFORMATION

Breed: Quarter Horse

Age: Three Years Old

Sex: Stallion

Condition: Good

Complaint: The case history was trauma to the mouth, leaving the incisors deformed and out of alignment. The owner requested that we do what we can to make the incisors more presentable for a sale in two weeks.

Examination: The 101 was discolored and emitting a foul odor. The #4 incisor quadrant had slight movement when palpated and was also packing feed. The molar arcades were typical for a three-year-old. Intra-oral x-rays of the upper and lower incisor arcades were taken upon examination.

The examination of the maxilla (skull) revealed the darkened color of 101 indicating that the pulp chamber is no longer viable, the tooth was dead. The gingiva is recessed and infected. The rough texture of the exterior of the 101 indicates a hyper-cementation process occurring. X-rays show a sclerotic line around the 101 indicating severe inflammation. The 101 has hyper-erupted due to trauma and inflammation.



The examination of the mandible (jaw) revealed the #4 quadrant had deviated out of alignment due to a fracture at the base of the roots. Four teeth in this quadrant: two permanent and two deciduous (baby) teeth. The 401 permanent is displaced along with the 402 and 403 deciduous teeth. The 402 permanent tooth is erupted caudally to the 402 deciduous. There is also a darkened deformed 403 permanent position with some periodontal disease, assuming to be traumatized.

Treatment: The maxilla: the 101 was extracted due to the irreversible damage of this tooth. The gingiva and alveolar socket was debrided and irrigated with a diluted Nolvasen solution. There was minimal hemorrhage due to the lack of periodontal ligament attachment which is common in severely diseased teeth.

The Mandible: although the 401 permanent tooth was malaligned, x-rays showed it to be a healthy tooth that could possibly move in closer alignment as eruption takes place. The 402 and 403 deciduous teeth were extracted because of the malalignment caused from the fracture and the fact that the permanent teeth have erupted caudally to meet. The deformed 403 permanent tooth was extracted due to irreversible damage that occurred at the time of injury. X-rays show a non-union fracture of the mandible between the 403 permanent and the 403 deciduous. When extracting these teeth, small portions of non-healed fracture was removed. It is important to remove and debride this sequestra to obtain complete healing of this area without a fistula tract.

Prognosis: The prognosis is favorable for a mouth that is comfortable and functional for mastication (grinding). There are teeth missing in the incisor arcade and malalignments, along with a displaced fracture of the mandible, so the horse will have a permanent deformity in the incisor arcades. Diligent dental maintenance in the future is critical and should retain the cosmetic appearance of the remaining incisors.

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straight into a cement wall, and when in a group, jockeying for position of the ever changing hierarchy, horses always seem to have their nose in the wrong place at the right time. Oral trauma is an all too often occurrence in equine, especially in young horses with developing tooth buds. Injuries along this order are common and each case is handled individually. Unfortunately, they result in life long follow-up dental care that is required two to three times more often than the otherwise regular dental maintenance program.

All too often, when a horse suffers from an oral injury, such as a broken tooth or worse, a displaced tooth. The owner is forced into addressing the horse's dental problem at least two to three times a year, since the teeth continue to erupt throughout the horse's life. With the increased dental attention required to maintain health and performance of such an injury, so does the expense. Therefore it is not surprising when owners opt to find a replacement horse.

What does this mean to the next horse owner? If this particular horse goes to an auction, "buyer beware". If he is sold privately, a pre-dental exam by a certified horse dentist would be able to identify the damage and provide a clear understanding of the critical nature of the dental requirements needed to maintain good health and ride-ability.

When deciding to purchase a horse, regardless of the price, find out if his dentition is going to cause added expense. It is better to know ahead of time than to wait and find out after he has lost weight or is unable to perform as expected.

If you were to purchase the horse presented in this case history and were unaware of the injury or the significance of his missing teeth. You wouldn't realize the injury's long reaching significance for a number of months. How many months? It is difficult to be specific since there are many factors associated with how fast this horse's teeth would erupt. An injured tooth causes the rules to change, a healthy tooth erupts at the rate of approximately $1/8$ " a year. I can however be certain that this horse will suffer pain, discomfort and be unable to chew properly if his teeth were not looked after with due diligence.

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

If you have a question about your horse's teeth and how they might relate to his health or performance call (306) 266-2060 or e-mail your question to mackequine@sasktel.net.