

# SORE MOUTHS IN HORSES

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The following questions were posed by a free-lance journalist who was writing an article on this topic in 2005

## 1. What signs does a horse exhibit if it has a sore mouth?

There are no less than 105 possible signs (see the attached questionnaire which is part of a three-part article "Fear of the Bit"). Of course, not every horse with a sore mouth will show all 105 signs but it is common for one horse to exhibit c.30 signs and the average number of bit-induced problems is in the region of 25. At the top end of the scale, one horse exhibited 50 problems, of which 45 (90%) were solved in the first month after removing the bit.

## 2. What causes a sore mouth?

Viruses, toxic plants, parasites and caustic chemicals can all cause sore mouths but these instances are rare. By far the most common cause of a sore mouth is the bit or bits. The abusive effect of metal in the mouth is intensified by the presence of a chain under the chin (the curb chain), as the two items acting in concert have the effect of a vice or thumbscrew.

## 3. Can changing the bit help, or going bitless (i.e. hackamore, bosal, bitless bridle).

All bits are potentially painful. At times, even master horsemen (e.g. Olympic competitors) inflict pain on their horses, albeit unintentionally. Novice riders are especially likely to inflict pain by using the bit method of communication, as they do not have an independent seat. The only sure way to avoid inflicting pain is to forego the use of the bit method of communication.

Perhaps the same thing can be said about the bit as has been said about the violin ... *"People should be allowed to play the violin only after they have mastered it."* With regard to the bit, even mastery is a questionable credential.

## 4. How often might a horse need surgery (i.e. bone spur, pull wolf tooth etc.) to correct this problem?

The only logical approach to treatment is removal of the cause. Sadly, even in today's medicine (human and veterinary) the cause of every disease is not known or properly understood. Where the cause is unknown, treatment is far from satisfactory and generally involves somewhat inadequate efforts to subdue, 'manage' or mask the symptoms. But in the case of a bit-induced sore mouth, the cause is obvious and self-evident. It follows that the proper treatment is to remove the bit. Painful bone spurs that previously were constantly kept inflamed and active by the presence of the bit will now become dormant and will no longer cause pain (rather like an old and inactive splint that no longer causes lameness).

Surgical removal of the bone spur is not, in my opinion, a logical line of treatment and I see no indications for its use. [Surgical removal of a sequestrum (a piece of dead bone) is, on the other hand, sometimes necessary in order to allow a chronically discharging sinus on the bars of the mouth to heal. Fortunately, fractures of the bars of the mouth that lead to the death of a section of bone are rare and so such surgery is not commonly indicated].

If a bit is no longer to be used, extraction of wolf teeth is no longer necessary.

After 6000 years of domestication of the horse, a method of communication has become available in the last five years that is acceptable both to rider and horse. The crossover design of bitless bridle provides the rider with a comprehensive, safe and effective method of communication with the horse's head. At the same time, it is physiologically acceptable to the horse, being pain-free and compatible with exercise. Pre-existing designs of bitless bridle (hackamores, bosals and sidepulls) have not provided comprehensive communication and all of them have been pain-based. The FEI, USEF and other organizations that currently require a bit to be used for competitions will, I would hope, delete this requirement in the near future, in the interest of enhancing the welfare of the horse and, therefore, complying with their own stated objectives.

##### **5. How often do you see horses with sore mouths?**

At 74, I am now retired from daily clinical work but if I were back in practice I would expect to encounter sore-mouthed horses all the time, every day. As the incidence of 'sore mouth' is high and 'sore mouths' are virtually omnipresent (whether or not they are recognized), any equine veterinarian must, by definition, be 'seeing' horses with sore mouths every day, and in large numbers. Currently, of course, not all veterinarians are yet aware of the results of my research in the last seven years and so the sore mouth syndrome in all its aspects is not being diagnosed with anything like the frequency of its true occurrence.

But my survey of the horse skull collections in four Natural History Museums shows that bone spurs are present in not less than 75% of adult horses. A smaller, pilot survey leads me to suppose that bit-induced attrition of the premolar teeth in the lower jaw, from a horse getting the bit between its teeth, may be present in as many as 50% of adult horses. If damage to hard tissue (bone and teeth) is as common as this, imagine how common it must be for the soft tissues of the mouth (skin of the lips, the tongue, the mucosal lining of the mouth) to be sore. Remember that 'gum' is essentially part of bone. It is modified periosteum (a densely fibrous 'skin' of the bone). Inflammation of gum is therefore, strictly speaking, a periostitis. Sore mouth in a horse is as common as you would expect sore shins to be in a human athlete if her

training involved having someone tap a heavy iron bar on her shins for an hour every day. The weakness with this analogy is that the human shin is far less sensitive than the bars of the horse's mouth and whereas the shin tapping might be spread over a hand span's distance, the bit taps on a two finger width of the bars.