## DIY Surgery on the Horse in Motion

This letter to the editor of "Veterinary Times," UK, was written by way of comment on an article that appeared in the September issue, 2008, with the title, "Bit Problems: confusing to equine practitioners, even those who ride." The article was authored by a veterinarian and written for the guidance of veterinarians but it contained so much misinformation that a comment seemed necessary. Sadly, the editor of Veterinary Times did not choose to publish the letter but my comments may be of interest to riders and drivers.

## DO-IT-YOUSELF SURGERY ON THE HORSE IN MOTION

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Dear editor,

Mr Graham Duncanson is closer to the mark than he realizes when he recommends his own approach to solving bitting problems and writes: " ... your investigation is going to proceed as if this is a surgical problem" ( "Bit Problems: confusing to equine practitioners, even those who ride." 15 September issue).

The word 'surgery' comes from a Greek word with the literal meaning, 'a working with the hands.' If we accept this literal definition at face value and consider use of the bit as an act of surgery, we see that use of the bit really is a surgical

problem. Furthermore, the surgery is not trivial:

- It is invasive, painful and often terrifying for the 'patient.'
- The 'surgery' is carried out on both soft and hard tissues
- and takes place almost daily
- in an exquisitely sensitive body cavity,

• using surgical 'instruments' (bits) that are blunt or sharp, light or heavy, simple or complex, single or multiple, direct or leveraged

• and sometimes accessory equipment such as curb chains, tongue-ties, crank nosebands, martingales, draw reins etc.,.

• The unsterile 'instruments' are manipulated remotely by means of two long straps (reins). The 'surgeons' use both hands.

• The forces applied to the tissues probably range from a few hundred grams per square centimeter to many hundreds of kilograms

• 'Operations' may take anything from 80 seconds or less (for a 6 furlong flat race) to thirteen hours or more (for an FEI 100 mile ride).

• The 'surgeons' are medically unqualified children and adults

who 'operate' without anesthetics as they sit (with varying degrees of stability) on the fully conscious and moving athlete

• that has to perform while the surgeon, the surgery and the surgical instruments are all interfering with his ability to think clearly, breathe freely and stride normally.

All of the tissues with which the bit comes in contact are bristling with touch, pressure and pain receptors. Few riders have the 'hands' of a neurosurgeon and the ability to signal with the required delicacy. But a horse can feel a fly landing on its face, so why the overkill? Metal on bone (the bars of the mouth) is not the only way to communicate. Most riders can, with advantage, use strap on skin (the skin of the face and head). They can keep out of the mouth altogether, using the crossunder bitless bridle. In this way, even a novice acquires the 'hands' of a master, in that strap on skin is painless.

All riders could take advantage of this safer and more effective method of communication if organizations from Pony Club to FEI would update their rules to bring them into compliance with this major welfare advance.

Mr Duncanson only lists four bit problems: reluctance to take rein contact, rearing, bolting and bucking. He thinks that bucking is rarely caused by the bit but, in my experience, bucking is most commonly bit-induced.

In the last ten years, by noting what behavioral problems disappear when a bitted bridle is replaced with the crossunder bitless bridle, I have learned that the bit causes over one hundred problems.1-3 Apart from hugely increasing the likelihood of riding accidents, these problems destroy the pleasure of riding and prevent riders from developing that harmony with their horse that is the goal of horsemanship.

A useful mnemonic for the hundred problems is to classify them under the six 'F's: fear, flight, fight, freeze, facial neuralgia and physiological confusion.

Mr Duncanson suggests use of a hackamore. But this is a potentially painful bitless bridle, fails to signal well for lateral flexion and may not solve the problem.

Mr Duncanson's misses the mark with his concluding statements. First, he writes: "Biting problems are extremely rare but are often suggested by the owners." In my experience, the exact opposite is true. Bit problems are extremely common and frequently unrecognized by owners.

Secondly, he writes: "We should take the complaints seriously but, sadly, a resolution is unlikely." On the contrary, veterinarians can now be of enormous help to owners by identifying the true cause of many riding problems. By removing the cause, resolution follows and is a matter for much rejoicing.

Yours faithfully,

ROBERT COOK, PhD, FRCVS 206, Birch Run Road Chestertown, MD 21620 USA