

# Equine Chiropractics: Dispelling the Myths

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Chiropractic care is making its way into the horse world even though there is a significant amount of resistance by the veterinary profession. Because chiropractic is perhaps the most often abused of any of the alternative modalities, many practitioners are uncomfortable with it. This article will help dispel some of the myths surrounding this extremely useful complementary therapy.

In 1992 the American Association of Equine Practitioners (AAEP) adopted a guideline concerning chiropractic care. More recently the American Veterinary Medical Association (AVMA) is considering chiropractic a valid modality of treatment and is currently working on guidelines for the practice of chiropractic. The AAEP guideline reads: "Veterinary chiropractic should be considered a medical act and should be performed by a licensed veterinarian or a licensed chiropractor under the direct referral of a veterinarian in accordance with that state's practice act. It is recommended that extensive educational programs be undertaken before a veterinarian or chiropractor is considered competent to practice chiropractic on animals."

## Definitions

Chiropractic is a science that considers horses as an integrated animal. The treatment is focused on the spinal biomechanics, the musculoskeletal, neurological and vascular relationships (1).

The word that causes the most confusion when chiropractic is discussed in veterinary medical circles is subluxation. The traditional veterinary definition is an incomplete or partial dislocation, less than a luxation. However the modern chiropractic definition is the alteration of the normal dynamics, anatomic or physiological relationships of contiguous articular surfaces (2). In other words, the loss of normal motion between two bones. The term Vertebral Subluxation Complex (VSC) is used to encompass all the manifestations of the biomechanical and neurological components of the subluxation, which includes the soft tissues around the joints.

Several other chiropractic terms need to be defined to help the practitioner understand chiropractic and its value as part of veterinary medicine. A chiropractic adjustment is a short-lever, specific, high velocity, controlled thrust by a hand or instrument which is directed at a specific articulation (2). The instrument generally used is called an activator, which looks like a small metal syringe and delivers a small, rapid force to a very specific area. The techniques for these adjustments are worked out scientifically, taking into account the biomechanics and physics of the joints.

On the other hand, manipulation is a term correctly used for forceful passive movements of a joint beyond its active range of motion. Generally a manipulation takes a joint beyond its active limit of motion using long levers and slow passive articular movements (2). This can be damaging to the joint capsule and the surrounding soft tissues, especially if it is done on a regular basis. The form of "chiropractic" done by many lay people and veterinarians who are not educated in correct chiropractic techniques is normally a crude form of manipulation. Often there will be positive changes in some of the horses treated with manipulation, however the long term health of the joints may be damaged. Manipulators often receive credit for a horse's improvement, and when the horse is no longer useful several years later, the "chiropractic" manipulation is rarely blamed.

Manipulations are often very violent and are the reasons that many veterinarians are rightfully skeptical about chiropractic. Most veterinarians have heard more horror stories about chiropractic or have had to repair the damage done when a manipulation overtly damaged a joint, as in the example of a ruptured round ligament in the coxofemoral joint.

## **Physiology**

The loss of normal motion between vertebrae decreases the normal pumping action of intervertebral discs, leading to faster aging of discs. Nerves become irritated at the intervertebral foramen causing aberrant neural activity. The ligaments and muscles become scarred and thickened producing pain and muscle spasm in the surrounding area. As shown in Table 1, a significant amount of damage occurs before symptoms of pain and discomfort are seen. The primary reason that chiropractic care is recommended on regular basis is to prevent the loss of motion of the joints from passing through the stage of seeing symptoms to the next stage of degeneration. Once degeneration has begun, chiropractic care can help the horse feel better; it will not necessarily reverse the degeneration. Routine care can prevent minor discomforts from progressing to severe problems and reality is that horses<sup>1</sup> spines are traumatized daily through playing and riding.

The primary reason for loss of normal motion in the spine is trauma. Horses are excellent at acquiring traumatic incidences both while being ridden and when turned out or in the stall. Stresses on the musculo-skeletal system such as pulling back when tied up, many training and riding techniques, training devices which put horses in unnatural positions for long periods of time and many other causes are listed in Table 2. Confinement in a stall does not allow a horse to stretch or roll, consequently the soft tissues around joints tend to stiffen and shorten causing a loss of normal motion.

## **Chiropractic treatment**

The conditions treated with chiropractic are stiffness, many aspects of poor performance, some lameness problems, especially obscure lameness and uneven gaits. Asymmetries can be observed in the horse's musculoskeletal system that are often corrected with chiropractic care, such as scoliosis of neck or back as examined by standing on a stool behind the horse. Pelvic asymmetries can also be corrected or helped. However, it is common for the uneducated lay person or veterinarian to adjust the high side of a sacro-iliac joint when correctly-done motion palpation would show that the opposite side is the pathologic side. The extremities can also become asymmetrical or lose correct motion in the joints from compensating for pain, poor shoeing, abnormal movement, and abnormal muscle or bone development.

A complete chiropractic exam includes a case history, posture analysis, gait analysis (including a lameness exam if needed), static palpation of the spine, motion palpation of the joints, muscle palpation, and checking for any differences in temperature over the spine (3). As the practitioner becomes more experienced, subtle differences in all of these parameters can be easily noticed, and the changes that occur after correct treatment are also easily felt and observed in the horse's performance.

In general most practitioners will expect to treat a horse once a week for up to four weeks, then preventively once a month if the horse is competing or being worked hard, though there is some individual variation in frequency depending on how mild or severe the problem is. If the veterinarian is also performing acupuncture concurrently, often the treatments will be less frequent. In general a single treatment is not going to be effective over a long period of time. Unfortunately many lay people are turning up at horse shows, giving a single treatment and moving on to the next town rapidly. This process is not benefiting anybody, especially the horse.

Evaluation of the chiropractic techniques used by practitioners and lay people needs to be done, so recommendations can be made to the clients. Since chiropractic is here to stay from the client's point of view, it is wise for the veterinarian to become involved at least at the referral level. Chiropractic should be done by qualified, trained individuals only and they should be able to discuss their training, or they probably have none. Veterinarians and licensed human chiropractors are currently being trained at the American Veterinary Chiropractic Association (AVCA) (7). A few states currently have or are working out a referral system to include the human chiropractors and yet keeping the veterinarian involved in the loop. Other states prohibit chiropractors working on animals, however the legislation is changing rapidly and it is best to check with each state on the correct procedure. A few states are considering requiring the AVCA course to allow veterinarians to practice chiropractic in their states.

Chiropractic should be done with the practitioners' hands or a small activator instrument. The techniques used should be gentle, though at times minor discomfort may occur. All that is being done with chiropractic is to restore motion to two joints, not to the entire horse at one time. If the techniques are rough, the horse will become tense and the danger of injuring it becomes greater. Overall the horse should enjoy the process and results should be seen in the form of reduced pain and better performance in one to four treatments. If no results are seen, a re-evaluation needs to be done, since the problem may not be a chiropractic problem or the work may be done incorrectly. The chiropractor should be knowledgeable and willing to communicate to work as a team for the horse's benefit.

## **Conclusion**

Chiropractic is a valuable treatment for horses, especially as clients are becoming more demanding of their horses and more aware of subtle lameness problems. Educational background and quality of work of the practitioner needs to be evaluated carefully.

## **References**

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