

Acupuncture in the Horse

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Acupuncture is probably the most widely known aspect of Traditional Chinese Veterinary Medicine (TCVM) in Western societies. While conventional medicine involves diagnosis based on physical and functional abnormalities of isolated organ systems, TCVM emphasizes consideration of all processes in the animal and the interrelationships present. Treatment in TCVM attempts to restore balance within the animal and in its relationship with the environment.

A great deal of anecdotal information is available on the benefits of acupuncture in the horse, however compared to humans where a great deal of research has been done and a long history of use can be referenced, application in the horse in more modern times is largely the result of extrapolation from known human point selection and techniques. However, classical acupuncture points for the horse do exist and have been used since the earliest recordings of acupuncture use in this species.

In TCVM the concept of Five Elements exists. The function of major internal organs, their effects on each other, and the relationship between the animal and the environment is explained. The Five Elements are Wood, Fire, Earth, Metal and Water. Each of the internal organs and sense organs correspond to one of these elements, and by virtue of the cycles between them organ systems remain in balance. Disturbances in these cycles are considered responsible for organ dysfunction and disease.

The classical theory of how acupuncture works is enabling the restoration of the flow of Qi (pronounced chee). The free and appropriate flow of Qi is necessary for normal organ function and freedom from both pain and disease. Flow of Qi is organized along meridians (or channels) around the body, and along these meridians acupoints exist. It is at these points where needles are applied to counteract blockage of Qi flow and return normal function.

Using current knowledge, acupuncture is thought to affect descending nerve fibres within the spinal cord as well as cause production of neurotransmitters and other compounds affecting pain sensation. Other compounds produced affect the general well-being of the animal. Direct blockage of pain impulses at the spinal cord can occur, and with repeated treatments changes in the organization of the nerves themselves have been demonstrated. Acupoints have been shown to be anatomically distinct from their surrounding tissue, containing increased concentrations of immune cells, blood vessels and nerve bundles.

Multiple methods of acupuncture point stimulation are used. Basic dry needling with lengths ranging from 0.5" (coronary bands) to 4" (deep points associated with the hip joints) is widely practiced. Acupuncture is thought to prolong point stimulation until absorption of the fluid, the most popular compounds injected being saline and vitamin B₁₂. Blood may be drawn from acupuncture points to control inflammation (hemoacupuncture). Application of heat to points by the burning of moxa (a traditional herb) on the needle handle is known as moxibustion, which is useful in chronic degenerative conditions such as arthritis. Electro-acupuncture is a modern development that seeks to prolong point stimulation, and has the benefit of being the subject of most research in both human and veterinary acupuncture. This technique has been found to have profound and measurable effects on endogenous opioid production, pain transmission and pain sensation.

An examination prior to the application of acupuncture will involve 'scanning' (applying pressure to) multiple acupoints to gauge sensitivity. From this procedure, and with consideration of the general constitution of the horse, a plan will be devised stimulating acupoints associated with the overall well-being of the horse and any underlying organ system that seems to be dysfunctional from a TCVM standpoint, as well as acupoints more closely associated anatomically with the area of interest.

There are many uses for acupuncture in horses. Lameness and associated musculoskeletal disorders (such as muscle pain) are well suited to the use of acupuncture by way of its ability to modify pain sensation and allow return of function. Specific acupoints are thought to be associated with primary sites of lameness when sensitivity to pressure on these points is found. While not a substitute for a conventional lameness examination, the use of acupoints may guide further diagnostic efforts. Additionally, many of the same points involved in diagnosis lend themselves to treatment of the condition. This is especially useful in chronic lameness incompletely responsive to traditional treatments or when owners wish to minimize use of medications such as phenylbutazone.

Laryngeal hemiplegia (roarers) also benefit from the stimulation of electro-acupuncture. An improvement in endoscopic grade was noted in one study involving 18 horses, and although rate and duration of response remains to be quantified, acupuncture provides a non-surgical treatment option for laryngeal hemiplegia.

Gastrointestinal effects are also reported. Colic pain can be reduced however multiple points are required and the definitive mechanism for the observed clinical benefit is not reported in the English literature. Motility disorders (especially post-operative ileus) have shown improvement with the use of specific acupuncture points. Electro-acupuncture of varying frequencies and acupuncture have both been used. Many reports in other species exist of the motility enhancing effects of specific acupuncture points, and these acupoints can be safely and effectively used in horses. Chronic diarrhoea is also amenable to treatment by acupuncture. In these cases, specific motility points can be used in addition to those for treatment of the underlying cause.

Reproductive uses of acupuncture are varied. While induction of estrus and improvement of sperm counts are reported, acupuncture is most commonly deployed to promote uterine clearance for which there is considerable anecdotal evidence. Reproductive problems tend to be chronic in nature and of multifactorial in origin making responses to acupuncture difficult to predict. Therefore, in treating these conditions, both points specific to the reproductive system and those promoting general well-being of the horse will be used.

Acupuncture is best applied as a complementary technique, promoting the well-being of the patient and assisting conventional therapies to achieve a positive result. While based on concepts that seem at first difficult to understand and are labelled 'alternative', acupuncture is more correctly considered part of an integrative approach to case management that gathers all relevant treatment options and applies them with consideration of the patient as a whole.