



Acupuncture points from a Chinese document dated 1399 CE

Acupuncture Makes Horse Sense

The practice has never been just for humans

Every October, an elite tier of international horse enthusiasts gather in the small town of Newmarket, in Suffolk, England. The gathering has been the heart of international thoroughbred racing since the reign of King Charles II (1630–1685). The group meets in the Tattersalls sales ring, the hub of world horse trading since its founding in 1766. In 2022, the most expensive yearling colt sold for \$3.3 million and the average price for all the horses traded that year was over \$400,000. Horses sold at Tattersalls end up racing, showing, and competing all over the world. A great many of the top horses are trained in the United States, Europe, the UK, and the Arabian peninsula—where many of their bloodlines originate. These horses are not just for thoroughbred racing. They are performance horses for a range of competitions including show-jumping, dressage, cross-country racing, hunting, polo, and three-day eventing (which

combines dressage, cross-country, and stadium jumping).

Transporting these high-priced horses from stable to stable around the world is a large industry. It often involves specially adapted cargo planes that only fly horses. A horse will enter a custom, enclosed stall, sometimes with enough room for three horses, or for a single horse and its support companion: a goat or another horse with whom the prize horse has bonded. Older goats display a sort of stoic lassitude that young thoroughbreds find comforting. The stall is then loaded into a jet. Emirates SkyCargo flies horses from the Gulf States to Europe, Asia, Africa, and the Americas. The one-way cost to fly a horse from London to Louisville, KY, for example, is about \$10,000. Another specialty carrier, Tex Sutton Equine Air Transportation, calls its dedicated Boeing 727 “Air Horse One®.”

Thoroughbred horses are not well-suited for air travel because of the

strange environment, noises, and inability to sleep—horses sleep about two or three hours a day, often in fifteen-minute standing naps, and find it almost impossible to sleep in a moving airplane. A groom travels with a horse to look after it. Another travelling companion is someone who can treat the horse with acupuncture. Acupuncture is widely used on performance horses. Clinical trials and trainer experience have shown that it reduces stress levels, calms a horse, and helps it travel without injury or upset. Clinical studies have shown significant improvements in levels of cortisol, lymphocytes, and white blood cells. According to a sampling of clinicians, horses respond positively to treatments and even tolerate electrically stimulated needles.

Acupuncture has been used on horses for thousands of years, going back to at least the first millennium BCE. The terracotta army of Qin Shi Huang (259–210 BCE), the emperor who unified China in 221 BCE, contains about 8,000 soldiers and over 600 horses, used to pull chariots or as mounts by cavalry. The Chinese elite loved horses; they were indispensable in the frequent

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wars they had with Mongolian horse-warriors from the northern steppes. Horses, however, are susceptible to a variety of back and neck injuries, as well as pains and strains in their legs and feet. This is especially true for highly bred performance horses, selected for their speed and athleticism. Of course, horses and people have been working closely together since horses were domesticated in Eurasia around 3500 BCE, and horses have evolved to deal with the weight of a rider, but back and leg issues are still a constant focus for all horse trainers for all breeds and disciplines.

The theory of acupuncture as a healing practice was developing at about the time that Qin Shi Huang was bringing China under unified

control. The foundational text of traditional Chinese medicine was *Huángdì Nèijīng* (“The Yellow Emperor’s Classic of Medicine”). This document was compiled from many sources in the last 400 years BCE and had many versions. In *Huángdì Nèijīng*, *Qi*, or life force, supplies the energy, warmth, movement, and activity of the *Yang* force, while blood provides the nourishment, moisture, cooling growth, and stability of the *Yin* force. Imbalances of these two—yin and yang, or blood and *Qi*—account for disease.

Huángdì Nèijīng broke from earlier shamanic traditions of healing, which held that diseases were the result of supernatural forces, caused by curses placed on the patient by others or

by demons in the world. This earlier theory of disease had been common worldwide. It called on the healer to identify the source of the malevolent force and rid the body of it. *Huángdì Nèijīng* held that disease was brought about by imbalances between a person and the surrounding environment, involving diet, activities, emotions, and age.

The therapeutic practices identified in *Huángdì Nèijīng* derived from treatment practices in the various regions of China, including medicines, moxibustion (burning of herbs near the skin), massage, bloodletting, and acupuncture. In some regions of ancient China, only medicines were used, but in other areas, acupuncture with thick or thin needles was speci-



An acupuncture therapy session at the Sha Tin Racecourse in Hong Kong

Specialty air carriers transport thoroughbred racehorses around the world.



LEILA MELHADO/ISTOCK

fied. The Yellow Emperor's classic identified nine types of needles, from thread-like implements to broader lancet-like blades. Acupuncture likely developed from such healing practices as bloodletting, lancing infections, and tattooing with needles—treatments that long predate the earliest Chinese texts. Tattooing has been used worldwide as a way of treating aches and pains. “Ötzi the Iceman” whose more than 5,000-year-old mummified remains were discovered in 1991 after glacial thawing in the European Alps, had many tattoos near his joints, perhaps to treat joint pain. Bronze acupuncture needles date to around 800 BCE in China, and during the Han Dynasty (206 BCE–220 CE) some gold needles were used. Plant spines, such as tree thorns, were also in wide use.

The use of acupuncture on horses

likely coincided with its use on people. In 2012, when digging foundations for a subway station in Chengdu, China, archaeologists found four graves from the early Han Dynasty, which included many texts and records. Among several medical treatises was a veterinary manual for horses with a theory of disease similar to the one in *Huángdì Nèijīng*.

It took a long time for acupuncture to arrive in Western veterinary medicine. The traditional Chinese practice of acupuncture (for people) was known in Europe from the late 1600s, when Willem ten Rhijne (1647–1700) was introduced to it in Japan and wrote a monograph dealing with it in 1683. Acupuncture is mentioned many times in European medicine after that. In 1858, T. Ogier Ward wrote in the *British*

Medical Journal, “Acupuncture is a remedy that seems to have its floods and ebbs in public estimation; for we see it much belauded in medical writings every ten years or so, even to its recommendation in neuralgia of the heart, and then it again sinks into neglect or oblivion. . . .” In the United States, a new awakening of interest came when *New York Times* writer James Reston (1909–1995) came down with appendicitis in China in 1971. He was accompanying Henry Kissinger, in preparation for Richard Nixon's visit the next year. Doctors in Beijing removed Reston's appendix under conventional anesthesia, but two days after surgery he had severe abdominal pain. A doctor (with Reston's approval) treated him with acupuncture and the burning of herbs. Reston reported that “there was a noticeable relaxation of the pressure

and distension within an hour and no recurrence of the problem thereafter.” This account, and the general interest in China at the time, led to a surge of interest in acupuncture, and the new realization that there was also an ancient Chinese tradition of veterinary acupuncture.

Veterinary acupuncture began to be considered in the United States in the early 1970s, when the National Acupuncture Association created a research division in animal acupuncture. Since then, and especially since 2000, acupuncture research and clinical trials have been increasing. Sarah Le Jeune, of the Department of Veterinary Medicine at the University of California Davis, specializes in integrative medicine, including acupuncture. She has treated competitive horses in various disciplines. When asked if she encountered resistance from skeptical owners and trainers, or veterinarians, she said the response is quite the opposite. Most new veterinarians are very interested in learning about integrative veterinary techniques.

Many U.S. universities that offer doctorates in veterinary medicine now offer programs in integrative medicine. These are seen as ancillary specializations used in conjunction with conventional veterinary medicine. While veterinarians may not use acupuncture as a primary treatment for all conditions, it is one of several treatment options used by many, especially for skeletal-muscular issues, such as back and neck pain, arthritic pain, and joint rehabilitation.

Other veterinarians, however, are openly skeptical or critical of the use of acupuncture, just as some clinicians deride its use in human medicine. In 2009, David Ramey, author, lecturer, and practicing equine veterinarian in Los Angeles, CA, commented in the online site *Science-Based Medicine* that, “when it comes to animal acupuncture, there’s apparently no absurdity sufficiently large to cause practitioners any embarrassment.”



Performance horses are traded for a range of competitions, including cross-country racing shown here.

The largest meta-analysis of acupuncture use in humans supports acupuncture’s efficacy for some conditions. In the *Journal of Pain* in 2018, Andrew Vickers, at Memorial Sloan Kettering Cancer Center in New York, NY, with eight other researchers reported their meta-study of 20,827 patients in 39 clinical research trials and concluded that “acupuncture is effective for the treatment of chronic pain, with treatment effects persisting over time. While factors in addition to the specific effects of needling at correct acupuncture point locations are important contributors to the treatment effect, decreases in pain following acupuncture cannot be explained solely in terms of placebo effects.” A similar study reported in *JAMA Oncology* in 2020 concluded, “This systematic review and meta-analysis found that acupuncture and/or acupressure was significantly associated with reduced cancer pain and decreased use of analgesics. . . .”

It is fair to say the jury is still out

about the efficacy of acupuncture in veterinary medicine, but trainers of performance horses are convinced it works. By Le Jeune’s estimate, 90 percent of performance horses have received acupuncture treatments—for two reasons: it seems to show positive results, and, trainers say, “it doesn’t test;” that is, acupuncture does not show up on the blood tests of competing horses. Acupuncture is also used by trainers for other breeds and disciplines, including the agile and athletic American quarter horses.

There is no award program for the frequent-flyer miles accumulated by the million-dollar ponies that fly around the world, but, according to the people who care for them, the horses ride more easily with the help of some ancient medicine.

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