

Acupuncture: History & Application

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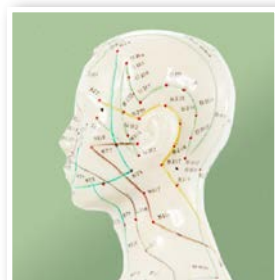
Acupuncture treatments are increasingly common in veterinary practice, and recent studies have reviewed the incorporation of this modality into academic curricula.¹ However, significant controversy exists surrounding the practice,²⁻⁴ with the most vocal criticism levied against traditional systems of diagnosis.⁵ The rise in evidence-based medicine has also prompted critical review of acupuncture and traditional diagnostic systems, which may include tongue and pulse examinations as well as classifications by yin (cold) and yang (heat).^{6,7} Claims for the antiquity of both acupuncture and Chinese veterinary medicine have incited the most significant scientific debate,^{2,3,8,9} whereas randomized controlled clinical trials of veterinary acupuncture remain relatively few.



Who Invented Animal Acupuncture?

The origin of acupuncture as currently practiced remains unclear. Herbal medicine occupied a prominent place in treatments, as surgical intervention was uncommon in ancient China because of cultural factors.¹⁰ Nevertheless, “needling” procedures have been mentioned in texts dating from more than 1500 years ago, but whether the practice resembled the current method is uncertain.^{11,12} Although speculative, some have theorized that shamans of the Xia-Shang dynasty (at least 1000 BCE) performed needling procedures with stone hooks (ie, bian) for diseases written in inscriptions found on animal bones and shells from the same time.¹¹ Bronze statues of organized points, or meridians, similar to those used today, have been identified from later historical periods.⁴ Only within the past 60 years has a Chinese government-driven attempt to standardize acupuncture emerged; despite such efforts, acupuncture continues to be practiced differently in the United States, Korea, China, Japan, and by various philosophical schools of Chinese medicine.¹¹

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The Chinese government aggressively endorsed modern acupuncture and successfully lobbied for its inclusion on the United Nations Educational, Scientific, and Cultural Organization (UNESCO, en.unesco.org) list of the *Intangible Cultural Heritage of Humanity* released in 2010.¹³ However, acupuncture today is an amalgam of constantly changing ideas and traditional Chinese medical practices. Chairman Mao revived the waning practice of acupuncture during the Cultural Revolution. According to official English-language documents, the practice was a “great treasure-house” and changes in the

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system had been made: “Some points on the human body which have proved incorrect have been corrected....Needles are now inserted in areas, points, and depths regarded as prohibitive to acupuncture in the past.”¹⁴ Acupuncture anesthesia was the pinnacle of the reemergence of acupuncture for Chinese leaders despite it being a distinctly modern invention.

The history of veterinary acupuncture, meanwhile, is scant. There is little argument that canine and feline acupuncture is a modern Western invention, as these species were of less cultural importance in China until recent times. Equine needling is described in some historical works, including *Yuan Heng Liao Ma Ji* from 1608 CE. Earlier documents from the sixth century BCE, including the *Canon of Veterinary Medicine*, may describe other Chinese veterinary interventions.⁹ However, those without knowledge of Chinese or the actual publication dates are left to decipher competing interpretations of these texts’ relationship to acupuncture practice and history.^{8,9} Certainly, diagrams of anatomic locations thought by some to represent classical equine acupuncture points do not follow the established modern connections between points. Application of the human meridian system to veterinary species is not documented in historical texts before Western intervention. These transpositional points are a subject of ongoing debate.^{3,15}

Competing Ideas Find New Meaning

The Chinese approach to human disease was historically rooted in changing philosophies, including Daoist, Naturalist, and



Confucian traditions.¹¹ The relative popularity of these philosophies influenced the emphasis on certain Chinese medical concepts, such as the system of opposites (ie, yin-yang theory) and the natural relationships of organs in Five Element theory. In addition, contemporary state-sanctioned traditional Chinese medicine promotes a concept of *bian zheng*, or pattern differentiation, with possible origins in Chinese treatises allegedly written during the Han Dynasty, or 200 BCE to 200 CE.¹¹ This pattern diagnosis system relies on a collection of medical, environmental, social, and behavioral factors, which together support a patient-specific treatment protocol. Current medical approaches stress individualized treatment despite little evidence that tailored treatments are better than other methods of point selection.¹⁶ However, the paths leading to a pattern diagnosis allow easier intersection with biomedicine, and the origin of the modern pattern system is traced to the 1960s at the outset of fusions between traditional and modern treatments.¹⁶

Veterinary medicine has followed the homogenization of Chinese medicine for humans and is now an adapted and standardized mixture of the Five Element, yin-yang, and *bian zheng* systems.

Chinese medical leadership accepted inconsistencies in the formation of modern Chinese medicine and acupuncture because of a desire to buffer Western medicine with previously dissociated traditional practices.¹⁷ The physician’s role was to diagnose and offer treatment, regardless of whether a cure was effected.¹⁸ When a cure did occur, the Chinese emphasis on efficacy rather than explanation reduced a desire for scientific support.¹⁹



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Conventional biomedicine, prevalent throughout China, is often the first treatment selected. In human medicine practiced in the United States, more patients are adopting complementary or holistic approaches before conventional techniques. The modern reemphasis on the preventive nature of Chinese medicine and the influence of patient factors on disease is likely responsible.¹⁹ According to one study, the individualization of American acupuncture appears to be the most extreme version of this trend, as illustrated by the duration of acupuncture appointments (American acupuncturists, 1.2 patients per hour; Chinese acupuncturists, >7 per hour).²⁰ The extensive patient communication fostered by Western acupuncturists builds a therapeutic relationship that may be critical to the increasing appeal of these modalities.²¹

Meridians: Chinese Medical Myth?

Modern transpositional meridians, or channels, form the basis for veterinary acupoint nomenclature but remain controversial because of associations with Five Element theory and traditional concepts of Qi (broadly defined as *energy*). Studies in human meridians are expansive but inconclusive; relationships to peripheral nerves, electrical resistance, circulation, interstitial flow, connective tissue, and cell composition have all been suggested.²² Some acupuncturists argue that meridians were designed as approximations and were not meant to replace careful palpation.²³ Established veterinary meridians provide utility in the division and description of potential needle sites.

Science of Acupuncture: A Contradiction in Terms?

Acupuncture and Chinese medicine have changed significantly, and arguments over the precise antiquity prove historically interesting but clinically irrelevant. Both detractors and proponents should regard the current practice as a distinctly modern adaptation with unclear lineage to antiquity, even more so when examining small animal treatment systems. One scholar proclaimed that the popularity of such treatments for humans “is a poignant criticism of the failures of mainstream healthcare.”²¹



Veterinary studies should better examine the reason for the adoption of acupuncture and how this may enhance care.

Scientific studies on the reported efficacy of acupuncture should be encouraged. Modern devices that apply low-level electrical current to needles (ie, electroacupuncture) induce frequency-dependent releases of endogenous opioids in some experimental models; further work in companion animals is needed.²⁴ Several canine acupuncture points show effects in preliminary studies (Table), and randomized controlled trials would increase the evidence-based literature in this field.^{7,25-28} Proponents of acupuncture should accept limitations in the technique's application, and detractors should acknowledge the widespread deficits in evidence-based medicine throughout the veterinary profession.²⁹ ■ **cb**

See **Aids & Resources**, back page, for references & suggested reading.

Table

Some Commonly Used Canine Acupuncture Points

Acupoint	General Location	Traditional Indication ³⁰	Modern Indication
PC-6	Mediodistal antebrachium	Anxiety, seizure, chest pain, nausea, arrhythmias	Nausea, vomiting
ST-36	Proximal cranial tibial muscle	Nausea, lethargy, diarrhea, knee pain, fatigue	GI prokinetic
GV-20	Caudodorsal midline of skull	Epilepsy, anxiety, rectal prolapse, sedation	Sedation