

Traditional Chinese Medicine (TCM) is a highly complex system that is both precise and flexible. It treats the mind-body-spirit as a single entity in harmony with nature and the environment. The Chinese view the body (human/animal) as an intricate and interdependent system in which all aspects of internal life and external environment are intimately intertwined. When the body-mind-spirit is in a state of harmony and balance with external influences, health is achieved. Traditional Chinese Medicine initially developed in an era before the introduction of modern medicine as a preventative form of treatment. Approximately 4000 years ago, practitioners used TCM to maintain the health of livestock, a valuable resource in China. The foundations of classical acupuncture texts were transmitted to Japan from China 1200 years ago, hence for the purpose of this text I will refer to the concepts of Oriental medicine rather than specifically TCM.

Acupuncture may be considered as one of the principal elements used in Oriental medicine for the treatment of many conditions, including those treated predominantly by physiotherapists such as musculoskeletal pain and disability. TCM or Oriental medicine is not a synonym for acupuncture as it can use many techniques including herbs, dietary advice, meditation, exercise and massage. Acupuncture can be defined as 'the insertion of a solid needle into the body with the purpose of therapy, disease prevention or maintenance of health'.

Hypothesis of Acupuncture Analgesia Mechanisms

The leading hypotheses of acupuncture analgesia mechanisms include local effects of needling, neuronal gating, the release of endogenous opiates, and the placebo effect. It is further proposed that the CNS is essential for the processing of these effects via its modulation of the autonomic nervous system, the neuroimmune system, and hormonal regulation. Clinical observation suggests that acupuncture needling may achieve at least four therapeutic goals:

1. Release of physical and emotional stress
2. Activation and control of immune and antiinflammatory mechanisms
3. Acceleration of tissue healing
4. Pain relief secondary to endorphin and serotonin release.

Use of acupuncture in animals

Acupuncture has become a more widely recognised treatment option in animals over the last few decades and the International Veterinary Acupuncture Society was founded in 1974 (www.ivas.org). The more recent rapid development of veterinary acupuncture has been driven by owners following media focus on its efficacy.

Acupuncture has been used for a variety of conditions including bovine reproductive disorders, canine paralysis and lameness and equine back pain. Conditions treated by physiotherapy that may also be amenable to acupuncture can include vertebral disorders, degenerative disc disease, joint disease and pain. The particular acupuncture points used are transposed from human points as TCM texts only provide points for large animals and birds.

Needle lengths ranging from 10 to 50 mm should suit all purposes in small animals and needles 10–100 mm should suit all purposes in large animals. Generally, the duration of treatment is most commonly 10–30 min. Gold beads can be embedded into points for lifetime treatment of hip dysplasia or epilepsy in dogs. Depending on the nature and severity of the condition, the frequency of treatment will be adjusted. In most cases, clinical results can be achieved after 2–5 acupuncture sessions. For more acute or severe conditions such as laminitis in the horse, acupuncture can be used once every 12–48 h until the pain is under control. Points that are most commonly used in veterinary medicine are along the neck, back, hips and shoulders and are most easily accepted by animal patients.

Trigger Points

Trigger points can be described as local tender spots located in a band of skeletal muscle that produce pain on compression which is felt as pain locally, and which can also evoke pain in a referred pattern. The aetiology and pathophysiology of trigger points remain speculative but clinically, trigger points are thought to produce pain, restrict movement, cause muscle weakness and alter the muscle activation patterns in both local and distal muscle groups. Autonomic signs such as hyperaemia, vasomotor and temperature changes and symptoms including dizziness and paraesthesia may be evident in patients with trigger points.