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# Tai Chi Chuan for Pain Management

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## INTRODUCTION

Tai Chi Chuan (a.k.a. T'ai Chi Ch'uan, Taijiquan) is an ancient Chinese martial art/exercise originally developed in the 13th century by Chang San Fang. Because of its underlying concepts of energy and its effect on the body, it has been incorporated into the overall system of Traditional Chinese Medicine (TCM). In the West it is often referred to merely as Tai Chi. This is somewhat erroneous because Tai Chi in Chinese refers to the symbols for Yin and Yang. It is more accurate to refer to it as Tai Chi Chuan, which means Grand Ultimate Boxing or Grand Ultimate Fist.

Originally, Tai Chi Chuan was a closely guarded secret reserved only for those within the Chen family. Since the 1800s it has evolved from the original Chen Style into many different styles (Yang, Wu, Sun, Hao) and is practiced by millions of people all over the world. Tai Chi Chuan is considered by many as one of the best low-impact exercises. Even though it is ancient, it fits well into our modern society. It can be practiced by anyone whether young or old, large or small, male or female. It does not require any special clothing nor does it require any special equipment. It is ideally suited for those with chronic pain.

## ORIENTAL MEDICINE: BACKGROUND

To understand the underlying concepts of Tai Chi Chuan, and how this ancient Chinese exercise is useful in pain management, one needs to have some understanding of the concepts of TCM.

Traditional Chinese Medicine is an energetically focused system of healing that dates back over 3000 years. One of the oldest references is the *Huang Ti Nei Ching* (Yellow Emperor's Internal Classic) which is composed of two separate books. The first is the *Su Wen*, which deals with physiology and pathology, and the second is the *Ling Shu*, which deals with the subject of anatomy and acupuncture. The estimated date of the writing is around 1000 B.C.

Most people in the West think of TCM as acupuncture. Acupuncture is only one part of Oriental Medicine. It is really a complex system of healthcare that includes acupuncture, moxibustion, dietary therapy, Chinese herbology, Tui Na (similar to massage), and exercises such as Tai Chi Chuan and Qi Gong (breathing exercises). For a traditionally trained Doctor of Oriental Medicine each of these modalities is as important as the other in the overall health of the patient.

Historically, the development of Oriental Medicine has been an evolutionary process. Ancient texts indicate and suggest that each part of TCM originated in a different part of China. Acupuncture originated in northern China, Chinese herbology began in the southern part, and Tai Chi Chuan originated in the central region.

It is believed that acupuncture was discovered quite by accident. There are numerous legends as to its discovery. The most popular one is an incident of an altercation between two groups of clansmen. One individual was struck in the shoulder by an arrow and his headache went away. The Chinese are great observers of nature. If there is one point that can relieve a physical problem, then there

must be more. Similar cause-and-effect situations were observed over the years and different pain problems were relieved. Initially, the development of acupuncture was limited to knowledge within a family that was passed down from father to son and generation to generation. Gradually, the knowledge was expanded and there were ancient writers like Chang Chung-Ching, who wrote the *Shang Han Lun* (Essay on Typhoid) (available in English) and Huang Fu-Mi, who wrote the *Chia I Ching*. These and many other well-known physicians and historians throughout the centuries wrote manuscripts on the accumulated knowledge based on the observation and outcome experiences of their time. Many of these texts are still in existence today and have been translated, revised, or modified and are being used as text books in the teaching of Oriental Medicine.

### ORIENTAL MEDICINE: CONCEPTS

The Chinese believe that there is an energy or vital life force in our bodies. This life force flows along predetermined pathways, which for our purposes we refer to as meridians. This vital life force is called Qi. It assumes many different forms. It comes to us genetically from our parents in what is referred to as Original Qi. It is in the food we eat and the air we breathe. It can also be enhanced by the exercise we do. For our purposes, we think of this life force collectively as that which gives energy to the various muscles, bones, and organs. The Chinese believe this is the vital energy that keeps us alive.

In a normal healthy person this vital energy flows continuously from one meridian to another and from one part of the body to another. The Chinese also believe that when the energy becomes blocked disease or pain problems occur. Let's think of the energy as a stream of water that runs continuously through the forest. If a tree or log falls over the stream, then the water is blocked and backs up forming a pond or a lake. In the human body, when there is an imbalance of energy flowing along the meridian it can be due to an internal problem or an external injury to a specific area of the body. The energy becomes blocked and backed up, quite often forming a tender point. If the problem is of short duration or is in an acute stage, the energy is probably no more than a small pond with minor consequences to the body. If the log across the stream or the energy is being blocked for an extended period of time, then the problem becomes chronic and we can think of this as a lake. It takes longer for the water to be drained out of a lake than a small pond. The same is said for energy blockage. In general, it may take longer to treat the chronic conditions than the acute conditions. The main objective of the Oriental Medicine practitioner is to identify and relieve the blockage of energy. This can be done by acupuncture, Chinese herbs, Tai Chi Chuan, etc.

### ENERGY PATHWAYS

Each of our internal organs is associated with an energy pathway. For example, the heart has a meridian we can call the Primary Heart Meridian. The energy of the Primary Heart Meridian originates in the heart and branches internally in three directions. The first branch travels from the heart internally downward into the abdomen to connect with the small intestine meridian. The second branch travels upward and runs alongside the esophagus to connect with the eye. The third branch leaves the heart, enters the lung, and emerges through its external pathway at a point in the center of the axilla on the medial side of the axillary artery. This is the first acupuncture point of the Primary Heart Meridian system. From there it travels along the posterior and medial aspects of the upper arm down to the cubital fossa. From there it descends along the posterior and medial aspects of the forearm to the pisiform region and enters into the palm, and then goes to the tip of the medial aspect of the little finger, where it ends.

In addition to the Primary Meridian systems, there are two distinct secondary meridian systems. The first is the Connecting Meridian system, which connects one meridian to another, and the second is the Muscle Meridian system, which does not have acupuncture points but connects the energy along the muscular system. It is the Muscle Meridian system that is of primary importance to us. Each Primary Meridian has a Muscle Meridian. Thus, the Primary Heart Meridian has a Heart Muscle Meridian. The Heart Muscle Meridian follows along the same pathway as the Primary Heart Meridian system. It begins from the medial aspect of the small finger inserts at the wrist, then travels upward to the elbow where it again constricts. It flows upward across the chest where it constricts in the center of the chest before it descends into the abdomen. This Muscle Meridian system is the important factor in pain points, muscle pain, and the benefit of practicing Tai Chi Chuan.

### TAI CHI CHUAN: DEVELOPMENT

Legend has it that Tai Chi Chuan and Qi Gong originated in the central part of China and more specifically on Wu Tang Mountain. Legends further attribute the creation of Tai Chi Chuan to more than one source. One of the most popular traditions is that in the 13th century a Taoist monk by the name of Chang San Fang watched an altercation between a snake and a crane and created the rudimentary basis of Tai Chi Chuan. Many of the movements of Tai Chi Chuan mimic the movements of animals or forces in nature and thus are named after the animal or natural occurrences. Within the various styles of Tai Chi Chuan there are individual postures in the exercise routine with names such as "Snake Creeps Down," "White Crane

Spreading Its Wings,” “Carry Tiger to the Mountain,” and “Wave Hands Like Clouds.” Each of these movements mimics an animal or force in nature.

In performing the Tai Chi Chuan routine the whole body is slowly and gently stimulated along all the muscle groups, one after the other. The primary method of stimulating these muscle groups is through stretching that alternately contracts and relaxes specific muscles groups and balances the muscular activity throughout the body. The Muscle Meridian system of the body is continually being stretched. Because the Muscle Meridian system follows along the Pathway of the Primary Meridian System any movement will affect the energy flow along the various meridians. The movements of Tai Chi Chuan activate all the Muscle and Primary Meridians. The stimulation of one part of the body has an effect on another part of the body. This follows the concept of Oriental Medicine where an experienced practitioner will balance the energy flow in one part of the body knowing that it has an impact on another part of the body.

To further understand the role that Tai Chi Chuan plays in pain management, it is helpful for one to also understand some of the work done by Dr. Janet Travell and those who followed after her, and their continued work on the development and understanding of trigger points in myofascial release.

Briefly stated, Travell believed and demonstrated that within a muscle or muscle group one or more areas in the muscle group may be tender. The tenderness can be due to different reasons; however, the most common is from an injury to the muscle group. The injury causes the muscle to constrict or shorten causing a tender point. The tightness or spasm on a tender point in the muscle group can affect one or more areas of the body in the form of pain. This pain area usually is in close proximity to the Primary Meridian System and the Muscle Meridian System. If the tenderness can be relieved, it will have a positive and beneficial effect on the constricted muscle and pain pattern problem. The relief of the pain pattern through stimulation of the trigger point can come about through exercises (Tai Chi Chuan), massage, heat therapy, acupuncture, etc.

#### **TAI CHI CHUAN: MOVEMENT AND PAIN RELIEF**

In Oriental Medicine spontaneous points that become sore are referred to as Ah Shi Points. The concept of Ah Shi Points was first put forth by Sun Si Mao (561–682) during the Tang dynasty. He believed that when soreness was felt as pressure was applied to a muscle an acupuncture point existed. The Ah Shi Points were used both for diagnostic purposes and for treatment. Many acupuncturists use the concept of Ah Shi Points to treat pain problems that lie along the pathway of the corresponding meridians. The Trigger Points of

Travell in many instances correspond with the Ah Shi Points of Acupuncture.

Tai Chi Chuan is sometimes referred to as “land swimming” because the movements of Tai Chi Chuan resemble very closely the continuous movements of swimming. These continuous movements work differently than physical therapy. In physical therapy there is movement of one or more muscle groups; however, the Muscle Meridian and the Primary Meridian are not always stretched in their entirety. Physical therapy is often for an isolated area where the problem exists. When you look at the stretching movements of Tai Chi Chuan, there is a distinct difference. The movements stretch both the arms and legs along the entire pathway of the Muscle Meridian and Primary Meridian. The constant and smooth flowing movements of Tai Chi Chuan release the tender points identified by Dr. Travell and the Ah Shi Points of Traditional Chinese Medicine. When the tender points can be stretched and relaxed, the pain associated with these tender points will diminish or go away.

Research is now being done here in the United States and overseas to prove the benefits of daily Tai Chi Chuan practice. As one watches the graceful movements of Tai Chi Chuan it appears to be effortless, yet the slow and deliberate exercise has proven to reduce falls in the elderly. Those who practice the art find that their muscles become strong and they acquire substantial flexibility. The mind–body effects of Tai Chi Chuan provide an added boost to both the physical and mental health of an individual.

#### **CONCLUSION**

In conclusion, integrating daily Tai Chi Chuan practice into a pain management program will provide the stretching needed to relax the muscles and reduce the pain of many chronic pain patients. Like any form of therapeutic exercise, the only way to achieve optimum outcome is to learn the art from a qualified instructor, and practice it on a daily basis.

#### **REFERENCES**

- Huang ti nei ching (Yellow emperor's internal classic)* (1000 B.C.).
- Jou, Tsung Hwa (1981). *The tao of tai-chi chuan*. Warwick, NY: Tai Chi Foundation.
- Liang, Shou-Yu, & Wen-Ching, Wu. (1993). *A guide To taiji-quan: 24 & 48 postures with applications*. Jamaica Plains, NY: Yangs Martial Arts Association.
- Yang, Jwing-Ming. (1987). *Advanced yang style tai chi chuan*. Jamaica Plains, NY: Yang Martial Arts Association.