Practical Guide to
Traditional Chinese Veterinary Medicine

Small Animal Practice

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Chi Institute Press
PRACTICAL GUIDE TO TRADITIONAL CHINESE VETERINARY MEDICINE

SMALL ANIMAL PRACTICE

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The successful practice of Traditional Chinese Veterinary Medicine (TCVM), as with any form of medicine, depends on having a clear understanding of both theoretical principles and practical techniques. The mindset required to understand TCVM is very different from that used in conventional medicine, and this can often make the transition to TCVM difficult for Western-trained practitioners.

With the ever-increasing interest in TCVM, there is a broad selection of books both ancient and modern on Chinese medical theory, acupuncture, herbal medicine, Food Therapy, Tui-na and lifestyle/exercise modification. Busy practitioners rarely have the time to search several books for clinically relevant information needed to design a comprehensive treatment protocol for each individual patient. It is also hard to find information on the TCVM treatment of species that have not traditionally been treated with TCVM.

There is a Chinese proverb that states: “Reading ten thousand books is not as useful as traveling ten thousand miles.” In other words, experience is worth more than theory. The aim of Practical Guide to TCVM is to provide a single, comprehensive resource for veterinary acupuncture, Chinese herbal medicine, Food Therapy, Tui-na and lifestyle modification for treatment of the most common disorders seen in modern clinical practice. By succinctly conveying the knowledge of expert practitioners, this text can be used as a quick reference in clinical settings, so practitioners can easily establish a treatment plan and gain valuable clinical experience.

This project began in February 2007 with an initial plan of 38 chapters in a single volume. Over time, more chapters were added, with 45 different authors now having contributed information on TCVM treatment of dogs, cats, horses, birds, snakes, camels, elephants, dolphins and other species. Since the project began, the authors and editors have invested countless hours collating information, summarizing knowledge gained from years of clinical experience, and revising and clarifying the text to prepare it for publication. The completed text has become so large that the editors have decided to publish it in 4 volumes for easier reference and clinical use.

This is the second of 4 volumes of Practical TCVM and describes the diagnosis and treatment of Small Animal Diseases. The first volume Practical Guide to Traditional Chinese Veterinary Medicine-EMERGENCIES AND FIVE ELEMENT SYNDROMES was published in January 2014. Two subsequent volumes will cover TCVM for equines (14 chapters) and exotic species (13 chapters), respectively. Each chapter of these volumes presents the complete TCVM treatment of disorders commonly seen in clinical practice.

In this volume, the most common TCVM Patterns for each conventional medical diagnosis in dogs and cats are discussed. For each Pattern, the etiology, clinical signs and treatment with acupuncture, Chinese herbal medicine, Tui-na, Food Therapy and lifestyle modification are described. Finally, each chapter includes case examples to illustrate the treatments that have been described, and provide information on the success of the treatment.

Throughout this volume will be abbreviations indicating the different types of acupuncture as follows:

- DN Dry needle acupuncture
- EA Electro-acupuncture
- Aqua-AP Aqua-puncture

It is the hope of the authors and editors that this format will provide a quick and easy guide to the TCVM treatment of conditions most commonly seen in small animal clinical practice. We also hope that these volumes will make the clinical application of TCVM less overwhelming for the new TCVM practitioner. Furthermore, we hope that these books will inspire more veterinarians to practice TCVM and gain the confidence and wisdom that comes from personal experiences with the effectiveness of this unique paradigm of medicine.

We sincerely appreciate the team of chapter authors, Drs. Patricia A Perkins, Cheryl Chrisman, David Hirsch, Greg Todd, Min Su Kim and Vicki Farthing, Deborah Mathis, Keum Hwa Choi, Pat Jordan, Lindsey Wedemeyer, Madeline Yamate, Signe Beebe, Sue Roberts Swaney, Heidi Mier, Connie DiNatale, Jenny Liu and Ashley Paper for their knowledge and expertise. Without their contributions, this book would be impossible. Our special thanks go to the peer reviewers Drs. Xiaoyuan Wei and Xuemei Cui who have illustrated and laid out the entire book. We would also like to thank the proofreaders Drs. Mary Foster Rodriguez, Linda Boggie, Geraldine Diethelm, Betsy Hershey, Cindy Lankenau, Wendy Wallace and Mr. Arick Josh Howard. Your contributions help make this book a pleasure to read.

August 1st, 2014
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Lindsey Wedemeyer received her veterinary degree from the University of Cambridge in the United Kingdom in 2004. After becoming certified in acupuncture and Chinese herbal medicine she established her own TCVM practice in the UK, which she successfully ran for several years before relocating to the United States and joining the faculty of the Chi Institute. She has lectured on TCVM internationally and is an assistant editor of the American Journal of TCVM. She has had numerous papers published in peer-reviewed journals and co-edited the recently published Annotated Yuan Heng's Classical Collection on the Treatment of Equine Diseases, the first ever English translation of this ancient textbook. Lindsey is currently studying for her Master's degree in traditional Chinese veterinary medicine and practices at New York Veterinary Acupuncture Service, a mixed animal, TCVM-exclusive practice in New York's Hudson Valley that she founded in 2012.

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Dr. Trevisanello received her veterinary degree from the University of Padua in Italy in 2003. She became certified in acupuncture in 2005. After moving to the United States in 2006 she joined the Chi Institute where she currently works as a consultant and teaching and administrative director. She is pursuing her Master’s degree in traditional Chinese Veterinary Medicine with an interest in Chinese herbal medicine. She is the layout designer for the American Journal of TCVM and has co-authored chapters in Xie’s Veterinary Acupuncture and Xie’s Veterinary Heriology.
Traditional Chinese Veterinary Medicine (TCVM) is an ideal discipline for the evaluation and treatment of problems affecting performance dogs. Minor injuries that can be neither seen radiographically nor quantified clinically can be detected, diagnosed and successfully treated using the principles of TCVM. These include pulse and tongue diagnosis, physical examination and palpation, acupuncture, Chinese herbology, food therapy and Tui-na.

Nearly every weekend, competitions in dog agility, obedience, fly ball, schutzhund, hunt tests, field trials and lure-coursing take place and an increasing number of people are enjoying these hobbies. Dogs whose ancestors once helped to manage livestock, hunt for food and guard our property are also enjoying these pursuits. For many people, the dog is a partner in competitions developed specifically to showcase their relationship and training. As these canine performance events continue to increase in popularity, people are pursuing effective methods to diagnose and treat subtle performance problems in their canine partners. The practice of TCVM provides a unique method for identifying and treating subclinical problems and helping to achieve optimum performance and a long, healthy working life.

With the advent of the sport of dog agility in the mid 1980s, a growing number of caretakers are seeking information on preventing injury and detecting subtle signs of physical problems in their dogs. Dog agility is similar to equine stadium jumping in that the dogs are required to complete a series of jumps and obstacles in a precise order at the fastest speed possible. Dog agility is the most popular timed canine sporting event, an event where the winner is the dog and handler with the least number of faults and who complete the course in the fastest time. This allows for the objective measurement of a performance problem. Often the caretaker is looking for an answer to the question, “Why is my dog performing slower than she used to?” and perhaps more importantly, “What can be done to return her to optimal performance?” As with acupuncture and sport horses, acupuncture with sport dogs can give the competitor a fair advantage by providing optimal health for the canine partner.

The benefits of acupuncture for performance horses have long been established. The caretakers of racehorses, dressage and eventing horses regularly employ acupuncturists when conventional medicine and training methods fail to correct a performance problem. The caretakers of performance dogs are seeking the same level of care for their canine athletes. The practice of TCVM for horses is not directly transferable to dogs due to some major differences in the mental and physical characteristics of these two species. These differences call for a change in the way we evaluate pain, perform a TCVM examination or Si-zhen and prescribe treatment. We will explore these differences and modify the TCVM diagnosis and treatment in order to define workable applications for the canine athlete.

As predators, dogs are an adrenergic-driven, Yang species. They are motivated to move by basic predator instinct and without regard for their bodies. This predator instinct includes an innate desire to stalk, to chase, to tug and to chew. This instinct is evident in all puppies and is strongly desired in performance dogs. Many training methods rely on the dog’s natural desire to chase, grab and hold. Coppinger has described the dog’s predator motor pattern, or natural instinct, as: “Orient toward prey → eye-stalk prey → chase → grab-bite → kill-bite → dissect prey → consume prey.” In this instinctual pattern, the “kill-bite” is modified or extinguished in the domesticated dog, while the rest of the motor pattern remains largely intact. The instinctual desire to orient towards and chase a moving object, such as a toy or a squirrel, is a highly charged, adrenaline driven, “Yang” response.

These behaviors, sometimes referred to as “drives,” are exploited in all types of dog training. For example, herding is a predator hunting instinct with a highly developed stalk component and a very low grab-bite component. The herding dog is bred for a high desire to
chase the stock with a low desire to actually grab-bite the stock. These traits are further developed through training to produce a dog who will work stock, moving them from one location to another at the request of the trainer, without actually harming them. Hunting with bird dogs is a predator hunting instinct with a high degree of both orient and eye-stalk and an inhibited chase and grab-bite. This allows for the development of a dog whose natural tendency is to alert to the presence of game animals, and hold very still while the human partner shoots over the dog. Through training, the dog is taught to return the fallen game without further injuring the bird. Dogs trained for agility, obedience and even the breed ring, all possess the predator motor pattern to some degree. This is developed as a reward for proper behavior in training. Dogs are therefore enthused by the sound of a squeaking toy, or the chance to chase a toy and/or play tug-of-war with the caretaker. All aspects of training for competitive performance events use some aspect of the dog’s natural tendencies as a predator. By giving dogs an outlet for their normal instincts, they often lead healthier, happier lives. Certainly they are more physically fit than the average pet and often are more integrated into society.

**Performance Dog Constitution**

Dogs representing each of the five constitutional elements are trained for performance events; however, certain constitutions are predisposed to excel in performance events. The focus and competitive nature of the Wood Element excels in sports involving protection training and obedience. These individuals are predisposed to problems involving the Wood Element including eye problems, tendon and ligament issues, allergies, aggression and frustration. Balancing this Element includes food therapy, acupuncture, Chinese herbal medicine, *Tui-na* and lifestyle changes to pacify the Liver and promote the smooth flow of Liver *Qi*.

The gregarious and outgoing nature of the Fire Element is often seen in dogs who excel in the conformation ring. Their showy attitude and outgoing nature catch the attention of judges and exhibitors alike. Their independence can make them slightly less reliable in protection and obedience sports than the Wood Element, although many Fire constitutions excel in those venues as well.

The Fire Element burns bright and is at the highest risk for damaging the Heart *Yin*. Balancing this Element includes therapies to strengthen the Heart *Yin* and promote global *Yin*.

Human guardians of a dog of the Water constitution often seek out performance events such as agility to help promote confidence in their otherwise timid and possibly insecure dog. These dogs can be deceiving as they may appear quite apprehensive in the examination room, yet are energetic and competitive in the performance ring. They are at greatest risk of suffering from back pain, osteoarthritis and depression. Tonifying the Kidney is necessary to keep the Water dog in balance.

Many sighthounds have a Metal constitution. These dogs are clean, quiet and thrive on routine. They excel at racing and include the Greyhounds and a host of similar breeds that hunt by sight. They find joy in running and in sleeping in soft places and can be recognized by their equal desires to chase and to rest. The Metal Element is controlled by the Lung. Tonification of the Metal Element includes tonifying the Lung *Yin*.

The Earth constitution dog is the favored patient of most veterinarians. With or without training, they are eager to please, friendly and dislike confrontation. Many hunting dogs possess an Earth constitution. They may lack the drive for sports that rely on competitive nature and speed, but excel at using their noses and working with their human partners to pursue, point or flush and retrieve prey. They are usually easy keepers, gaining weight if not fed properly or not given enough exercise. Imbalance can lead to gastrointestinal problems including stress diarrhea, vomiting and general malaise. Tonification of the Spleen is required to keep the Earth dog in balance.

Characteristics and herbal tonification for each constitution are listed in Table 1.1.

Evaluating each dog in terms of constitution helps the veterinarian to see behavioral problems as abnormal shifts in the balance between Elements. It helps remove the idea of moral obligation in dog behavior and prevents the pathologizing of normal behavior in a species that is asked to live under less than normal circumstances. A herding dog who chases people on bicycles is not demonstrating a pathology, but a normal chase behavior. Training, whether in herding, obedience, agility or another sport, allows the dog an appropriate outlet for his instinctual impulses. Training and competition should be encouraged for the mental and physical health of the dog.

**Creating Balance in a *Yang* Species**

No matter the individual constitution of a dog, their *Yang* nature and the exploitation of their adrenaline-driven instincts for performance may result in the development of
a Yin Deficiency. The increased reliance and emphasis on Yang activities leads to Yang consuming Blood and Body Fluids, resulting in the Yin Deficient signs of Yin Heat or false Heat, a dry tongue and thready, rapid pulses. Lifestyle modifications are necessary to help balance the performance dog’s Yang activities. Diet is a major contributing factor in Yin Deficiency. Dry, concentrated, carbohydrate-rich commercial dog foods rob the dog of Yin fluids. Many commercial dog foods rely on inexpensive protein and carbohydrate sources of a warming nature. Their ingredients of chicken, lamb, oats and corn are too warming, and are not balanced with sufficient cooling foods. Together with the Yang activities, the diet therefore further destroys Yin. Foods that are thermoenergetically balanced or those loaded with cooling, Yin-building components are recommended for the performance dog. When possible, caretakers should be encouraged to feed a balanced, home-prepared diet of quality, energetically balanced ingredients. When travel makes feeding of a home cooked diet difficult, clients are urged to shop for a prepared food with the highest proportion of cooling or neutral ingredients.

In order to balance the Yang activities of competition and training, a portion of the dog’s activity should be geared toward quiet, meditative, relaxation-inducing activities. With the exception of sleep, Yin activities are not a function of the lifestyle of performance dogs. These dogs are active, chasing and running both within the scope of training and often during free time. A special effort should be made to help the dog perform activities that foster a calm and quiet mind. For wild dogs, this need is met by the daily travels and migration of the dog pack. Dogs travel for long periods of time in search of prey. This traveling takes place through calm walking, which is only intermittently interrupted by the adrenaline-driven orient-chase-kill motor pattern. The wild dog therefore lives a more balanced lifestyle. Daily walks for the performance dog will help to balance its Yang activity. Brisk walks on a short leash allow the dog to use excess adrenaline without stimulating adrenaline production. Traveling with the head up and eyes forward, the body produces calming Yin neuropeptides such as serotonin and endorphin.2

These walks are effective meditation for balancing the Yang nature of the performance dog. Properly applied sedating Tui-na techniques can also help to relax the performance dog and to promote the smooth flow of Qi and the Yin processes of the parasympathetic nervous system. Tui-na along the Bladder, Gallbladder, Liver and Kidney Channels particularly Pressing (An-fu) at SP-6, HT-7, GB-20, GB-21, KID-3 and BL-23 helps to promote Yin and relaxation.

Identifying Subclinical Pain in the Performance Dog
TCVM for the equine species relies on the use of diagnostic points or areas of sensitivity beyond the Ah-shi points of the Bladder Channel.3 The presence of sensitivity at these diagnostic points corresponds to specific conditions or anatomic weaknesses. The Yin nature of the horse anchors mind and body, resulting in a consistent response to palpation along the surface of the body. By contrast, the dog’s Yang nature results in the separation of mind and body such that stimulation of the basic predator instinct results in an adrenergic surge, which temporarily overrides physical discomfort. A dog that possesses the instinct to chase a squirrel will often still give chase, even if he is physically uncomfortable. The equine diagnostic points are of no value in evaluating the canine species.

A dog’s desire to perform is rooted in a basic instinct; therefore, this desire often overrides the dog’s need to rest or to protect an injured area. Veterinarians are well versed in the problem of controlling a dog’s activities when exercise restriction is prescribed for healing of an injured back or limb. The caretaker is warned that they must not use the dog’s activity level as a gauge of pain. For many dogs, the instinct to chase is so strong that it will override all pain impulses. A dog just recovering from orthopedic surgery must be physically prevented from the accidental opportunity to chase a squirrel. Similarly, when a dog has a more subtle injury in training, the dog is often still keen to perform and it takes an astute observer, a timed event or a TCVM evaluation to uncover the presence of a problem.

TCVM Diagnostic System for Sport Dogs
In order to evaluate the performance dog, the TCVM practitioner must take into account their Yang nature and modify the Si-Zhen or TCVM diagnostic system. The dog experiences some degree of stress whenever he or she is in a new environment. This stress response will override pain impulses, making detection of a performance problem more difficult. Dogs are easily distracted and will orient toward interesting or unfamiliar sounds, which can also interfere with the evaluation. For these reasons, a quiet environment away from distractions and the use of non-slip flooring are strongly recommended for evaluation.
Rubberized, ribbed matting is available at hardware and home improvement stores. A length of matting for gait evaluation will help solve the problem of a hospital’s slick flooring and allow for a more honest gait evaluation of the patient.

**Observation (Wang-Zhen)**

In the inspection or Wang phase of the diagnosis, the practitioner observes the general body condition, the hair coat and the Shen or mental acuity of the patient. The tongue color and shape are also noted. Here one must consider that the tongue is the major thermoregulatory organ of the dog and that the tongue shape and coating may be altered due to this process. Some dogs have normally pigmented tongues, which can make evaluation more difficult. However, the clinician should not dismiss the tongue diagnosis, but instead should make the diagnosis with these special considerations in mind. The dog’s hair coat should appear natural and lay flat, without abnormal hair whorls. Even dogs with abundant and curly coats should have an even appearance. If the coat seems to stick out in places or curl across one side of the body, this can signal an area of sore muscles and Qi congestion. The dog’s expression, which includes the eyes and mental acuity, should signify calm attention. A pinched expression or dull eyes can signify discomfort anywhere in the body.

Inspection includes gait analysis. While lameness is often most apparent at a trot, subtle changes in the gait of a dog are more obvious with careful observation of the walking dog. At a trot, the dog will hold the back level and relatively steady, while at a walk, the dog will exhibit all available motion in the back. Therefore, if at a walk there are areas of the back that appear tight or weak, which move either too little or too much, these are possible clues as to the area of concern and should be noted. After gait analysis, the general stance of the dog is noted. A comfortable dog will stand with the body balanced over the four limbs. Each leg will bear an equal amount of weight and the legs will be “squared up” underneath the dog. A dog that stands with one leg held farther away from the body, or has the appearance of one foot being smaller in size while standing, is a dog that is not bearing equal weight on all limbs. This is another sign of a subclinical problem. The topline, head carriage and tail set are also evaluated both at a walk and while the dog is standing.

**Hearing and Smelling (Wen-Zhen)**

The hearing and smelling, Wen aspect of diagnosis remains consistent across species. Careful auscultation of the heart and lungs is performed. Breathe sounds, rate and rhythm are noted. Any odor from the skin, mouth and ears should be evaluated and noted. Careful listening during the gait examination will help to detect abnormal footfall or scraping or scuffing of the feet along the ground.

**Inquiring (Wen-Zhen)**

Inquiring or Wen, as always in veterinary medicine, involves a surrogate history. The veterinarian relies on the caretaker’s interpretation of behaviors. Inquiry is extremely important in the TCVM canine performance medical evaluation. The caretaker has unique knowledge about both the dog’s behavior and performance strengths and weaknesses. At the same time, the caretaker may misinterpret questions or mistakenly assume that some questions reflect a dog’s moral character. For instance, asking the caretaker if their dog is aggressive toward strangers in an effort to determine the patient’s constitutional nature may horrify the caretaker of a dog with a Wood constitution. The label of “aggression” holds moral (and at times legal) implications for the caretaker. An awareness of these implications will help the clinician sort through caretaker responses. Questions that are specific to the dog’s physical abilities are very effective in eliciting signals of subclinical performance problems. A list of helpful questions is provided in Table 1.2.

**Palpation (Qie-Zhen)**

The palpation or Qie-Zhen examination involves palpation of the femoral pulses, palpation along the Channels, palpation of the Shu and Mu points and a detailed, modified orthopedic examination. The Qie-Zhen is performed with the dog standing and the caretaker or assistant at the dog’s head. Canine pulses are interpreted in reference to the dog’s size and body type. Dogs with a lean, athletic build such as the greyhound have pulses that are very evident and easily palpated, while heavily muscled dogs have femoral arteries that are set deep between the quadriceps and the pectineus muscles and are not as readily felt. The size of the dog determines normal pulse quality and rate, with smaller breeds having thinner, faster pulses and larger breeds having wider, slower pulses. The practitioner should therefore evaluate pulses based on a standard relative to the current patient’s body type.

Most performance dogs are well trained and comfortable with an examination. Many will stand and stay at their caretaker’s request, allowing the practitioner to palpate pulses with the patient standing squarely on all four feet. Pulses should always be evaluated after the patient has become acclimated to the environment and before uncomfortable aspects of the examination or procedures are performed, such as taking a rectal temperature, which may cause discomfort and an increased heart rate.
Integrated Si-Zhen
The orthopedic examination is modified to locate areas of subtle discomfort. Joint range of motion is therefore evaluated to detect the limits of comfortable range of motion for the patient rather than the absolute limits of joint mobility. Here we wish to define which joints and which Channels are causing discomfort or limiting performance. The objective is to discover exactly which joint motion is suboptimal and exactly which Sinew Channels are involved.

It is recommended that the examination begins with a limb that has been identified through observation to be completely normal. Dogs dislike having their feet palpated and even though most are trained to accept it, it is important to get a baseline response by starting with a comfortable foot. The practitioner begins at the distal joints and moves proximally. Again, it is important to note that the point of examination is to determine not how far a joint can be bent in flexion/extension but rather, where the dog first becomes uncomfortable in flexing or extending the joint. Signs of discomfort are very subtle and may include licking the lips, lifting the head, orienting the ears toward the practitioner, a shift in weight or a slight tensing of more proximal flexor muscles. Comparing range of motion in joints bilaterally will yield information helpful in identifying problem areas.

Evaluation of range of motion in the spine begins by observing the dog’s spine at a walk. At the walk the spine exhibits all available motion (at a trot the spine is held level). The entire spine, including the skull, neck and entire back should be palpated for warm spots that denote inflammation. Less commonly, cool areas may be felt that reflect old, chronic stiffness. Gentle dorsoventral palpation of the spinous processes of the vertebrae helps evaluate motion in the spine. Food should not be used to evaluate rotation in the dog’s neck or lateral flexion in the spine. Many dogs are strongly motivated by food and will overuse their bodies in order to obtain it. As the idea here is to detect very subtle alterations in movement, use of food will obstruct evaluation of the dog.

In order to facilitate evaluation of cervical motion, the examiner can stand along the left side of the dog, and while facing in the same direction as the dog, cradle the dog’s head in the left hand while placing the open right palm along the right side of the dog’s neck. The dog is then gently encouraged to turn the head to the right, toward the practitioner’s open palm. This can be facilitated by asking the dog’s handler to walk toward the right side of the dog, causing the dog to turn the head. The practitioner then feels for muscle tension along the inside curve of the neck. The process is repeated on the opposite side of the neck to allow a direct comparison of muscle tension on each side. It can also be repeated dorsally and ventrally.

When evaluating the dog’s back, it is important to keep in mind that a dog’s natural response to pressure is to move into the pressure. This oppositional thigmotaxis is evident as dogs will naturally pull against a collar and leash and must be taught to keep the leash loose. In training classes, caretakers are discouraged from using direct pressure over a puppy's lower back to teach a sit position because the puppy's natural instinct is to push up against the pressure and resist sitting. A dog that moves away from pressure, even gentle pressure, is therefore displaying discomfort.

Sensitivity at Ah-shi or Bladder Channel Back-Shu Association points can be used to help diagnose a problem. Shu point sensitivity may be due to a Zang-fu or organ problem, an area of local Stagnation, or Stagnation along the related Channel or Sinew Channel. Dogs will often tense against the repeated palpation of a sensitive point. If a point is sensitive when first palpated but shows no sensitivity on repeated palpation, that should therefore still be recorded as point sensitivity.

A modification of the panniculus reflex is employed to evaluate areas of hypersensitivity along the thoracic and lumbar spine. The panniculus reflex is more commonly employed to locate spinal cord lesions. Because a dermatome is innervated by a specific spinal cord segment, when the skin of the dermatome is pinched with a hemostat, a reflex is noted in the underlying cutaneous trunci muscle’s twitch. This reflex requires adequate stimulation, which typically requires the use of a hemostat to pinch the skin. In the modified panniculus reflex one assumes that the reflex is intact and rather than evaluating the reflex for the presence of intact neurology, the reflex is used to detect areas of hypersensitivity. The practitioner palpates along the inner Bladder Channel with only mild to moderate digital pressure. In a patient with comfortable and balanced musculature, the panniculus reflex will not be elicited. However, patients with abnormal muscle tension will twitch the cutaneous trunci muscle and the area of hyperesthesia should be noted.

Once the Si-Zhen is complete, a TCVM treatment is prescribed. If the problem is very mild, of short duration and amenable to acupuncture, needling and Tui-na alone may be used. If the problem is more severe or a recurrent condition, Chinese herbal therapy together with
acupuncture and Tui-na may help alleviate clinical signs and return the dog to optimal performance.

**Tendinomuscular or Sinew Channels**

By using the modified orthopedic examination, the Tendinomuscular or Sinew Channels are evaluated as well as the range of motion of joints. The Sinew Channels are responsible for extending and flexing muscles and joints to move the limbs. The Sinew Channels begin at the extremities and travel to the trunk and head, and each Sinew Channel is associated with one of the twelve primary Channels. They circulate on the periphery of the body and follow the pathway of their associated primary Channel, but are much wider than the primary Channel.4

Problems with the Sinew Channel result in impaired movement of a joint or limb. Excess or Stagnation in a Sinew Channel may result in muscle spasm, abnormal contraction, local pain or inflammation and sensitivity to light pressure. These Excess conditions often show some improvement with non-steroidal anti-inflammatory drug (NSAID) therapy. They also respond well to sedating Tui-na techniques with a strong stimulus, low frequency, short duration and counterclockwise direction.

Problems of Deficiency in a Sinew Channel may include a dull sensation of deep pain, lack of skin tone or cutaneous trunci muscle tone, or superficial cold pain. These Deficient conditions will have a poor response to NSAID therapy and often respond well to moxibustion therapy and to Tui-na with a mild stimulation, long duration, high frequency and a tonifying or clockwise direction in application.5

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**Figures 1.1 to 1.16 demonstrate evaluation of the Sinew Channels of the neck, spine, thoracic limb and pelvic limb4,6**

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**Sinew Channels of the Cervical Area**

- Dorsal Cervicals: BL, KID, SI (KID and BL continue caudally to pelvic limbs)
- Lateral Cervicals: LI, SI, TH, GB (LI, SI, TH continue distally to thoracic limbs, GB travels to pelvic limb)
- Ventral Cervicals: LU, ST (LU travels to thoracic limbs, ST to pelvic limb)
- Signs of neck pain include:
  - dropping the head out of the hands
  - resists bending neck

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**Figure 1.1:** Evaluation of motion and Sinew Channels of the cervical area4,6
a. Cervicothoracic junction: extension

b. Cervicothoracic junction: flexion

The Bladder Sinew Channel runs a superficial course through this area with the Kidney Sinew Channel running deeper near the vertebrae.

**Figure 1.2:** Evaluation of Sinew Channels at the cervicothoracic junction

- Sinew Channels of Front Toes
  - P1 (med) – LU
  - P2 (med) – LI
  - P3 (lat) – PC continues deep to carpal bone
  - P4 lateral – TH
  - P5 - HT (med) and SI (lat)

For patient comfort, it is recommended to begin the evaluation at the distal aspect of the limb and then move proximally.

**Figure 1.3:** Evaluation of the Sinew Channels of the front feet
Carpal flexion should be equal bilaterally

Carpal Sinew Channels:
- LI
- TH
- SI
- HT
- PC

**Figure 1.4:** Flexion of carpal Sinew Channels

**Figure 1.5:** Extension of carpal Sinew Channels
• Flex elbow and shoulder
• Keep thoracic limb under body
• Elbow:
  • LU binds at center
  • L1 – lateral
  • HT – medial
  • SI – medial condyle of the humerus
  • PC – medial
  • TH – caudal tip of elbow (TH-10)

Figure 1.6: Flexion of the thoracic limb Sinew Channels

• Extend shoulder and elbow
• Many dogs with good flexibility can extend their thoracic limbs out past their nose
• Axilla:
  • HT, LU, SI
  • BL crosses beneath axilla
  • PC binds to axilla (abduction)
  • GB anterior to axilla

Figure 1.7: Extension of thoracic limb Sinew Channels
Figure 1.8: Flexion of shoulder Sinew Channels

- Rotate limb caudally
- Keep the elbow and leg close to the dog’s body
- The most flexible dogs can bring their carpus up to their topline
- Shoulder sinew Channels
  - LU, LI, TH
  - BL meets at LI-15 (acromion)

Figure 1.9: Evaluation of shoulders, scapulohumeral joint and cervicothoracic junction flexibility

- Open shoulders by extending thoracic leg and adducting to cross in front of body