

# STUDY GUIDE

## ANNOTATED OUTLINE

### INTRODUCTION

Animal acupuncture is based on Traditional Chinese Medicine (TCM). This ancient healing art is composed of a series of theories that guide the practitioner toward assessing and specifically selecting the acupoints that will most effectively resolve the pattern of disharmony that a particular animal is experiencing.

In Eastern Pathology, the assessment process is key to an effective acupuncture session. The TCM theories identified in the Assessment portion of the National Certification Examination for Animal Acupuncture (NCEAA) include: *Zang-Fu* (Internal Organ) Theory, Meridian Theory, The Five-Phases of Transformation (also called the Five-Element Theory), *Chi* and Blood Theory, and *Yin –Yang* Theory. TCM practitioners need to have a working knowledge and demonstrate sufficient understanding of the TCM assessment tools such as: The Four Examinations and the Eight Principles.

Additionally, practitioners need to have an understanding of how the body functions from the TCM perspective. Practitioners must know how *Chi*, also seen as *Qi* or *Ki*, as life-promoting energy in its many vital forms functions within the animal body. Knowing how the Six Exogenous Pathogens are exhibited is important as well.

Successful assessment requires the integration of these ancient eastern theories, assessment tools, and a host of basic TCM concepts. By integrating this body of knowledge, the practitioner is able to review the current complaint, decipher the indicators to identify the pattern of disharmony (syndrome) the animal is exhibiting, and then arrive at an appropriate basis for acupoint selection for an acupuncture session.

There are over 150 different methods of assessment in Chinese Medicine. We do not expect the acupuncturist to have mastered more than just the basic assessment tools and be able to integrate the significant theories and concepts to discern patterns, or syndromes.

Additionally, there will be variations from text to text and school to school with regard to terms, phraseology, references, etc. In most cases, acupuncture practitioners should have enough familiarity with the subject matter and exposure to a variety of TCM texts to be able to discern the intended meaning. An example of this some texts and schools refer to *San Jiao* others use the English term “Triple Heater,” while others use “Triple Burner.” Another example is, *Yuan Chi*, in English it is translated in many ways: Source Chi, Original Chi, Pre-Natal Chi, Heavenly Chi, etc. We must assume that someone working in this field is knowledgeable enough to understand these variations.

## ASSESSMENT TOOLS

The Four Examinations to Differentiate Patterns:

- Observation
- Listening / Smelling
- Questions / Inquiry
- Physical Palpation

The Chinese used all of their keenly honed senses and training when assessing an animal. They use the Four Examinations to ascertain the animal's condition.

- Observation – the first step – visual assessment of coat, excretions, general attitude, discharges, etc.
- Listening / Smelling – listening for respiratory issues, vocalization and smelling for heat conditions.
- Questions / Inquiry – asking about lifestyle, preferences, health history, current complaint
- Physical Palpation – General condition, muscle tone, hot and cold areas, injuries, scars, external manifestations, etc.

The Four Examinations under the heading of Observation often use a Vitality “rating” to Differentiate Patterns:

- Full Vitality – Youthful, energetic, and no injury to Chi. If illness occurs, full recovery is expected.
- Lack of Vitality – Insufficient Essence and Chi of the Yin Organs leading to deficiency patterns. Illness may not lead to full recovery.
- Loss of Vitality – Decline of vitality due to damaged Chi leading to critical condition and unfavorable outcome.
- False Vitality – Flicker of life before death.

Indicators of Observation of Vitality “rating” for Differentiation of Patterns:

- Full Vitality – Manifestation of normal Essence and Chi, agile clear minded, good breathing, alert, eyes shining.
- Lack of Vitality – Less lustrous eyes, coat, over all condition, listlessness, shortness of breath.
- Loss of Vitality - Serious damage to Chi, sluggish, indifference, dull eyes, feeble and intermittent breath, reflecting Zang-Fu Organ (internal organs) decline.
- False Vitality – Temporary spark of life, serious disease pattern leading to death.

Association Points, or Back *Shu* Points, are located along the medial spine or branch of the Bladder Meridian. They are an acupoint classification that has a direct internal-external relationship and energetic connection with the organ for which it is named:

- Bladder 13 is connected to the Lung
- Bladder 14 is connected to the Pericardium
- Bladder 15 is connected to the Heart
- Bladder 18 is connect to the Liver

- Bladder 19 is connected to Gall Bladder
- Bladder 20 is connected to Spleen
- Bladder 21 is connected to Stomach
- Bladder 22 is connected to Triple Heater
- Bladder 23 is connected to Kidney
- Bladder 25 is connected to Large Intestine
- Bladder 27 is connected to Small Intestine
- Bladder 28 is connected to Bladder

Association Points, or Back *Shu* Points are used both for assessment and therapeutically because they have a direct relationship and energetic connection with the Zang-Fu (internal) organs.

Alarm Points, or Front *Mu* Points, are located on the ventral aspect of the animal's body. When used for assessment, this category of points has the energetic characteristic of indicating if an imbalance has gone beyond the meridian level and is affecting the organ system itself. The Alarm Points are related to the 12 Zang-Fu organs:

- Lung 1 is related to Lung
- Stomach 25 is related to Large Intestine
- Conception Vessel 12 is related to Stomach
- Liver 13 is related to Spleen
- Conception Vessel 14 is related to Heart
- Conception Vessel 4 is related to Small Intestine
- Conception Vessel 3 is related to Bladder
- Gall Bladder 25 is related to Kidney
- Conception Vessel 17 is related to Pericardium
- Conception Vessel 5 is related to Triple Heater
- Gall Bladder 24 is related to Gall Bladder
- Liver 14 is related to Liver

The 8 Principles are used to sort the indicators of a particular pattern of disharmony in order to discern Patterns. This sorting tool helps to identify if the nature of the condition the animal is exhibiting is:

- Exterior or Interior
- Hot or Cold
- Excessive or Deficient
- Yang or Yin

Understanding the nature of the Six Exogenous Pathogenic Factors helps to discern patterns of disharmony. These Exogenous Factors can only invade the animal's body if the animal's Chi is weak. The Six Factors include:

- Wind
- Cold
- Heat / Fire
- Damp

- Dry
- Summer Heat

Tongue assessment is very complex and takes years of study. For the purposes of NCEAA, we will only ask the most basic information regarding Tongue Assessment which includes:

- Red Tongue indicates a heat pattern
- Pale Tongue indicates a cold pattern
- Dark Red Indicates extreme heat pattern
- Purple indicates a stagnation of Blood

Distinguishing patterns using the Pulse Assessment requires in-depth study. For general purposes it is important to know:

- Moderately strong and moving smoothly is normal
- Rapid pulse indicates a heat pattern
- Slow pulse indicates cold condition

Yin-Yang Theory, Zang-Fu Organ Theory, and Meridian Theory are essential components to discerning patterns. The entire assessment process is dependent on extensive knowledge and understanding of how the organs systems and vital substances function within the body. These concepts are covered in the Basic Traditional Chinese Medicine segment of this Study Guide Outline.

### **SAMPLE QUESTIONS:**

1. A clinical sign of Excess Yang is:
  - a. High Fever
  - b. Manic behavior
  - c. Acute dehydration
  - d. All of the above
2. The animal is unable to keep weight on. Which organ system could be used to help this animal?
  - a. Heart
  - b. Spleen
  - c. Lung
  - d. Kidney
3. Bl 23 can be used to tonify the Kidneys?
  - a. True
  - b. False

4. The acupoint most commonly used for various blood conditions is:
  - a. Ht 7
  - b. Sp 3
  - c. Bl 17
  
5. Which point is located 2 cun lateral to the umbilicus?
  - a. Ht 3
  - b. Sp 9
  - c. St 25
  - d. Bl 1
  
6. While observing the animal you see that he has a nasal discharge and his coat is dry. Which organ system would you assess further?
  - a. Liver
  - b. Spleen
  - c. Lung
  - d. Heart
  
7. Observing the animal you see that there is a distinct atrophy of the hindquarter muscles. Which organ system would you further assess?
  - a. Liver
  - b. Spleen
  - c. Kidney
  - d. Heart
  
8. You notice that the animal's coat is very patchy and he is missing hair in patches. What should you do first?
  - a. Discuss shampoo with the guardian
  - b. Recommend veterinary care
  - c. Suggest they see a groomer
  - d. The dog needs more exercise
  
9. Loss of Vitality refers to:
  - a. Feeling acute exhaustion
  - b. State just before birth
  - c. Pattern of Harmony
  - d. Pattern of damaged Chi

## BASIC TRADITIONAL CHINESE MEDICINE THEORIES

Traditional Chinese Medicine is composed of a series of theories and concepts that distinguish ancient Chinese philosophy and medicine from all others. The following section of this Study Guide Annotated Outline provides a brief summary of the theories essential in the application of acupressure with animals.

### *Chi and Yin-Yang Theory*

*Chi*, also seen as *Qi* or *Ki*, functions in the body to:

- Promote
- Warm
- Defend
- Control
- Activity (*Chi Hua*)

*Yin* and *Yang* are the two major aspect of *Chi*. *Yin* and *Yang* are:

- Opposites
- Related
- Interdependent
- Infinitely Divisible
- Transform into each other

*Chi* flows throughout the body on a 24-hour cycle where each organ system receives its optimal flow of *Chi* for two hours. This is known as circadian rhythm or the 24-hour body clock. Offering an acupressure session during the organ systems optimal flow can enhance the effectiveness of the session. If an animal was consistently exhibiting a particular indicator during a 2-hour time flow, look to that meridian or organ system for a possible imbalance.

In Yin-Yang Theory, *Yang* is associated with attributes of fire and *Yin* is associated with attributes of water. Fire and water reflect the nature of *Yin* and *Yang*. *Yin* and *Yang* are used to identify patterns of disharmony:

- Excess Patterns – Excess *Yang*/ Heat & Excess *Yin*/Cold
- Deficient Patterns – Deficient *Yang* / False Cold & Deficient *Yin* / False Heat

Acupressure session principle and selection of acupoints is based on identifying or discerning the pattern or syndrome. For:

- Excess patterns – sedate or disperse the excess
- Deficient patterns – tonify or strengthen the deficiency

Indicators for:

- Excess *Yang* can include: dehydration, fever
- Excess *Yin* can include: low temperature, hypo-activity
- Deficient *Yang* can include: poor digestion, lethargy
- Deficient *Yin* can include: loss of blood, emaciation

Some schools and texts identify only three Vital Substances, others say there are four, and others list five, even six. The following is a general list of Vital Substances that animal acupressure practitioners need to be aware of and how they function within the body:

- *Chi (Qi)*
- *Shen* (Spirit)
- *Jing* (Essence)
- Xue (Blood)
- Jinye or Jingye (Body Fluids)

There are many different types of Chi that function within the animal's body. Knowing where these forms of Chi are stored and how they function allows the practitioner to fully address the animal's condition. For instance, if an animal were experiencing muscle atrophy, the practitioner could address the issue of balancing the organ systems related to Nutrient Chi. A few types of Chi are:

- Source Chi / *Yuan Chi*
- Nutrient Chi / *Ying Chi*
- Defensive Chi / *Wei Chi*
- Chest Chi / *Zong Chi*
- Immune System Chi / *Zhong Chi*

### **Meridian and Zang-Fu Theory**

Meridians, or channels, are pathways that course throughout the animal body to circulate Chi (vital energy), Blood (nutrient rich substances), and other vital substances to all parts of the body. Meridians, like roadways on a map, flow along specific pathways. For instance, the Lung Meridian begins on the chest and courses down the medial side of the forelimb. The Bladder Meridian begins on the inner canthus of the eye and travels adjacent to the dorsal midline of the back and down the lateral side of the hind limb. The acupressure practitioner must know the location and be able to trace all 12 of the Major Meridians.

Meridians have an internal-external relationship with organs for which they are named. There are 12 Major Meridians, though some texts refer to only 11 internal or Zang-Fu organs. Some schools and texts do not include the Pericardium (the sac protecting the heart) as an organ, yet the meridian is as important as the other meridians since it is protecting the Heart. There are six Yang meridians, which are paired with six Yin meridians.

- Yin Meridians – Lung, Pericardium, Heart, Spleen, Liver, Kidney
- Yang Meridians – Stomach, Small & Large Intestines, Gall Bladder, Bladder, Triple Heater

The internal organs, or *Zang-Fu* organs, (*Zang* means Yin and *Fu* means Yang), have specific functions that they must perform to keep the body balanced and functioning properly. The following provides a partial list of functions, the sense organ related to the organ, when it is receiving its optimal Chi flow, the fluid associated with it, the emotion

attributed to it, the element in which it is classified, etc. Below is a digest of the roles each organ system performs.

### **Lung**

Governing Chi and respiration  
Controls the channels and blood vessels  
Controls the dispersing, descending *Zong* chest Chi  
Circulates Chi – *Wei* or Defensive Chi  
Regulates the water passages  
Controls skin / body hair  
Fluid is Mucus  
Opens into the nose  
Related emotion is grief, prolonged sorrow  
Metal Element – Yin  
Chi flow - 3am – 5am

### **Large Intestine**

Receives food and water from the Small Intestine  
Re-absorbs fluid & excretes feces  
Controls the skin  
Balances Chi and Blood  
Opens into the nose  
Metal Element – Yang  
Chi Flow - 5am-7am

### **Stomach**

Controls digestion of food  
Controls transportation of food essences  
Controls the descending of Chi  
Originator of fluids  
Earth Element – Yang  
Chi Flow - 7am-9am

### **Spleen**

Governs transportation and transformation of liquid and solids of digestion to create Nutrient/*Ying* Chi  
Controls the blood within vessels  
Controls the muscles and four limbs  
Originator of Blood  
Opens into the mouth  
Fluid is Saliva  
Relates to thought or over thinking (worry)  
Earth Element – Yin  
Chi Flow - 9am-11am

**Heart**

Governs the blood  
Controls the blood vessels  
Houses the mind / Shen (spirit/attitude)  
Regulates heat by controlling sweating & panting  
Regulates nervous system  
Related emotion is joy  
Fluid is Sweat  
Opens into the tongue  
Fire Element – Yin  
Chi Flow - 11am – 1pm

**Small Intestine**

Controls receiving and transforming  
Separates turbid from clear fluids  
Related to discernment  
Regulates functions of the intestines  
Regulates body fluids  
Fire Element – Yang  
Chi Flow - 1pm-3pm

**Bladder**

Stores and excretes urine  
Removes water by Chi transformation  
Water Element – Yang  
Chi Flow - 3pm-5pm

**Kidney**

Stores Essence and governs birth, growth, reproduction and development  
Produces marrow, fills up the brain and control bones (teeth)  
Dominates water metabolism  
Controls the reception of Chi  
Grasps Chi from the lungs  
Opens into the ears  
Manifests in the hair  
Controls the lower two orifices  
Houses Will Power  
Related emotion is fear  
Fluid is internal Spittal, Joint Fluid  
Water Element – Yin  
Chi Flow - 5pm-7pm

**Pericardium**

Protects the Heart from exterior pathogenic factors and emotional stress  
Assisting the Heart in governing blood  
Related emotion is trust

Belonging to the Fire Element  
Fire Element – Yin  
Chi Flow 7pm-9pm

### **Triple Heater**

Directs Source Chi to the organs and Source Points  
Coordinates the three compartments  
Responsible for thermal regulation  
Regulates water passage  
Fire Element – Yang  
Chi Flow 9pm-11pm

### **Gall Bladder**

Stores and excretes bile  
Controls judgment  
Controls the sinews / soft tissue  
Wood Element – Yang  
Chi Flow - 11pm – 1am

### **Liver**

Stores/distributes blood  
Detoxifies blood  
Regulates emotions  
Related emotion is anger  
Ensures harmonious smooth flow of Chi  
Controlling the sinews, tendons, ligaments  
Fluid is Tears  
Manifests in the nails / hooves  
Opens into the eyes  
Wood Element – Yin  
Chi Flow - 1am – 3am

The Conception and Governing Vessels, two of the eight extraordinary meridians, are not associated with a particular organ system, but the acupoints along these vessels are consistently used with the acupoints of the 12 Major Meridians. Below are the functions of these two vessels.

### **Conception Vessels**

Creates balance among the 12 Major Meridians  
Unites the 12 Major Meridians encouraging Chi flow to adjust when blockages exist  
Governs reproductive cycle and fetus development  
Regulates blood flow among the 12 Major Meridians  
Regulating the peripheral nervous system

## **Governing Vessel**

Strengthens Yang Chi

Balances Chi among the 12 Major Meridians

Governs the nervous system

Regulates blood flow among the 12 Major Meridians

By having a firm command of the Zang-Fu organ functions, the practitioner will be able to discern both patterns of harmony and disharmony related to each organ system. For instance, if an animal were exhibiting a dry coat, had recently lost his mate and appeared to be grieving the loss, and his breathing seemed shallow, the practitioner would look to the Lung for a possible imbalance. Another example: a dog presents with chipped and broken nails, yellow discharge from his eyes and his behavior is erratic and volatile, the practitioner would check to see if the Liver was balanced.

## **Acupoint Classifications**

Acupoint Classifications are often referred to as the Chinese Medicine Bag because they are the “tools” of the practitioner. Acupoints have known energetic benefits and are used accordingly. Acupoints with common energetic attributes have been grouped into specific classifications so that a practitioner can quickly select a point to help address a particular issue. The classification identified as Master Points offer the practitioner acupoints that enhance the effect of a session that is concerned with a particular anatomical region of the body, such as the hindquarter. The most common Acupoint Classification that every practitioner would do well to have at their finger tips are:

- Association / Back *Shu* Points
- Alarm / Front *Mu* Points
- Source / *Yuan* Points
- Master Points
- Influential Points
- Ting/*Jing*-Well Points
- Connecting/ *Luo* Points

## **Five Phases of Transformation, also known as The Five-Element Theory**

The Five Phases of Transformation depicts a highly organic model of balance within animal/human life and the natural world. The ancient Chinese created this highly sophisticated conceptual model to serve as both a philosophical construct and a method of sorting complex information for the purpose of discerning patterns and selecting acupoints for an effective acupuncture/acupressure session.

The Chinese looked at the natural environment and recognized that we are all part of the environment. They wanted to understand how animals and humans were able to cope with and find a healthful balance within the environment. They selected five metaphors to represent five patterns of energy:

- Wood
- Fire

- Earth
- Metal
- Water

To establish balance, the Ancient Chinese recognized that there had to be both a Creation Cycle (*Sheng* Cycle) and a Control Cycle (*Ko* Cycle). Growth cannot get out of hand; there must be control or there can be no balance. The health of the environment and, in its smaller form, the health of the living body is dependent on this balance. It is a system that is continuously reflected at the macro and micro levels.

- The Creation Cycle: Wood fuels Fire; Fire creates Earth; Earth compresses to Metal; Metal creates Water; and Water feeds Wood.
- The Control Cycle: Wood controls Earth; Earth controls Water; Water controls Fire; Fire controls Metal; and Metal controls Wood.

The Five Phases of Transformation describes a dynamic balancing process. For an acupressure practitioner to use this theory effectively, he/she must learn the correspondences associated with each of the phases. There are many texts that focus on a single phase of transformation going to the nth-degree of possible corresponding associations. What you need to grasp is a “sense-perception” of each of the “elements” delineated in the Five Phases. To begin to comprehend the metaphoric or symbolic system that describes different energies, such as a Wood or Fire Pattern, you can begin with the correspondences:

- The Life-Cycle Phase of Transformation such as birth is associated with the Wood Phase and growth is associated with the Fire Phase;
- The Season of the year – Wood corresponds to Spring while Fire is associated with Summer;
- The nature of the Climate – Wood is associated with wind, Fire corresponds with hot;
- The Emotion associated with Wood is anger and Fire is joy;
- The Sensory Organ – Wood is connected to the Eyes and Fire to the tongue;
- A Governed part of the Body – Wood is related to the tendons and ligaments, Fire is related to the vascular system; and,
- The corresponding Meridians for each of the Phases are important in being able to discern the pattern of disharmony and know how to restore balance. There are many texts available that provide correspondence charts concerning the Five Phases of Transformation.

The Five Phases of Transformation describes the relationships between the organ systems and how to maintain a harmonious flow of Chi, Blood and other vital substances. It is used as an assessment tool and many point selection techniques have been devised based on this concept of balancing the energies of the body.

## SAMPLE QUESTIONS

1. The fluid of the Lung is:
  - a. Water
  - b. Body Fluids
  - c. Tears
  - d. Mucous
  
2. The Spleen does all of the following except:
  - a. Dominates the 4 limbs
  - b. Opens to the mouth
  - c. Produces bile
  - d. Transforms dampness
  
3. All of the following properties belong to Yang except:
  - a. Nourishes
  - b. Warms
  - c. Promotes
  - d. Goes up
  
4. The Gall Bladder helps the Heart in governing the blood.
  - e. True
  - f. False
  
5. The Gall Bladder and Liver's most identical function is:
  - a. Storing Blood
  - b. Controlling tendons & ligaments
  - c. Replenishing the Blood
  - d. Governing Chi and Blood

## **Energetics & Location of Major Acupressure Points**

The scope of this section of the exam covers the physical location of major acupoints and their primary energetics.

### **Locating Acupoints**

- Cun Measurements
- Landmarks
- Fixed, proportional and moving points

### **Acupressure Points**

- Association Points
  - Location & Energetics
- Alarm Points
  - Location & Energetics
- Connecting Points
  - Location & Energetics
- Jing-Well/ Ting Points
  - Location & Energetics
- Influential Points
  - Location & Energetics
- Master Points
  - Location & Energetics

## **SAMPLE QUESTIONS:**

### **Small Animal Acupoint Energetics & Location**

1. Ki 3 is located on the caudomedial aspect of the hind limb in the thin skin between the medial malleolus and calcaneal tendon.
  - a. True
  - b. False
  
2. The Association point located on the dorsal aspect of the spine 1.5 cun lateral to the caudal border of the spinous process of T3:
  - a. Bl 11
  - b. Bl 12
  - c. Bl 13
  - d. Bl 14
  
3. An acupoint contraindicated in pregnancy is
  - a. LI 4
  - b. LI 20
  - c. Bl 1
  - d. GB 30

4. Moving landmarks include the mouth, ears, nipples, eyes.
  - a. True
  - b. False
  
5. The cun measurement of a Great Dane is likely to be greater than that of a Cocker Spaniel.
  - a. True
  - b. False

## **Canine Anatomy**

The purpose of this study guide is to provide guidance as to which areas need to be studied prior to sitting for the National Exam in Equine Acupressure. We encourage you to begin your studies by referring to your class curriculum of the school from which you received your certification. At the end of this study guide we offer some additional resources that you may want to consider for more information.

**DESCRIPTION:** Basic Canine Anatomy and Surface Landmarks.

The scope of this section of the exam covers the structure of the tissues, bones and boney landmarks of the dog. The areas covered in this exam include: the axial and appendicular skeleton, major joints, ligaments, tendons, and muscles.

### **Anatomical Terms of Direction**

Understanding of the anatomical terms of direction and their use

### **Canine Surface Landmarks**

Understanding of the surface landmarks of the canine, their location & function

### **The Canine Skeletal System**

Function of Bone

Bone Contours

Shapes of Bones

Canine Axial Skeleton

Canine Appendicular Skeleton

Thoracic Limb

Pelvic Limb

### **Joints**

Types of Joints

Major Joints

### **Ligaments**

### **Major Muscles**

Muscle Function

Muscle Characteristics

## Specific Muscles

### SAMPLE QUESTIONS:

#### Canine Landmark Anatomy

1. The term 'dorsal', refers to:
  - a. The surface facing the ground
  - b. The surface facing the head
  - c. The surface facing away from the ground
  - d. None of the above
  
2. The dog's head is located proximal to the tail.
  - a. True
  - b. False
  
3. The patella is a sesamoid bone.
  - a. True
  - b. False
  
4. The cranial portion of the hip bone is known as the:
  - a. Ilium
  - b. Trochanter
  - c. Pelvic Limb
  - d. Tuber Coxae
  
5. Ht 7 is located:
  - a. On the transverse crease of the carpal joint
  - b. On the olecranon
  - c. On the acromium process
  - d. None of the above

## Study Guide Acupressure Technique, Practice and Ethics

Acupressure Techniques can vary significantly from school to school and instructor to instructor. There are some basic commonalities that we can assume including:

- Selecting a location that is safe and where there is little distraction for both practitioner and animal;
- Introducing yourself to the animal;
- Centering your energy and healing intent;
- Knowing the “language” or signals of the animal;
- Understanding how long to hold an acupoint;
- Familiarity with how animals indicate releases of energy;
- Awareness aware of how to effectively use the 24-hour circadian rhythm / 24-hour Directional Flow of Chi;
- Placing both hands on the animal during a session;
- Knowing when not to offer an acupressure session;
- Knowing the acupoints that are contraindicated during pregnancy;
- Understanding that fewer acupoints are to be used in a session when an animal is weak or sick;
- Understanding that you should not work with an animal that is exhibiting undiagnosed pain of any type, the following require veterinary care before any acupressure is performed - lameness, bloating, fever, inflammation, injury, etc.;
- Knowing not to work with an animal that has experienced a sudden change in behavior until a veterinarian has seen the animal;
- Recognizing that acupressure sessions are animal-centered.

Chi circulates completely throughout the body in a 24-hour period. Each organ system receives its optimal flow of Chi for 2-hours as the Chi circulates. Knowing the flow of Chi is important in both assessment and resolution of conditions. This is known by a number of names: The 24-Hour Body Clock, Circadian Rhythm; Directional Flow of Chi, etc. The flow of Chi is as follows:

- Lung – 3 – 5 am
- Large Intestine – 5-7 am
- Spleen – 7- 9 am
- Stomach – 9-11 am
- Heart – 11 am – 1 pm
- Small Intestine – 1 – 3 pm
- Bladder – 3 – 5 pm
- Kidney – 5 – 7 pm
- Pericardium – 7 – 9 pm
- Triple Heater – 9 – 11 pm
- Gall Bladder – 11 pm – 1 am
- Liver – 1 – 3 am

First Aid is an essential tool for the acupressure practitioner. Being able to support life in an emergency situation is critical to the overall knowledge of health care. There are many canine first aid courses that cover life-threatening issues, such as:

- Resuscitation
- Loss of consciousness
- Immediate wound/injury care
- Sprains
- Sudden lameness
- Broken bones
- Eyes tearing heavily
- Poisoning
- Etc.

A Scope of Service defines the actual practice parameters expected of a practitioner. Knowing the acupressure practitioner Scope of Service is critical because we need to be aware of exactly where the practitioner's role begins and ends within the spectrum of the animal healthcare professions. Not being aware of the animal acupressure practitioner's Scope of Service can lead to endangerment of the animal and public, plus, lead to legal liability issues. The scope of Service covers the areas of:

- Knowledge and skills necessary to perform the tasks of an acupressure practitioner competently;
- Safety issues;
- Hygiene;
- Knowledge of canine behavior;
- Ability to manage a practice and maintaining records using common business practices;
- Clarity regarding when to refer to other healthcare professionals;
- Etc.

A Code of Ethics is a document that refers to an individual's or group's values, beliefs, standards, and expectations that need to be reflected in practitioner behavior. Ethical behavior pertains to acceptable and unacceptable actions. The practitioner needs to have a clear sense of right and wrong behavior and act within those boundaries as well as be aware of the legal ramifications of actions. This can include but is not limited to:

- Acting respectfully toward animal and human clients and fellow professionals;
- Only performing techniques for which the practitioner is deemed competent;
- Offering recommendations within the practitioner's Scope of Practice;
- Maintaining client confidentiality;
- Setting business practices and communicating them to clients.
- Please refer to the NBCAAM Code of Ethics available on the website: [www.NBCAAM.org](http://www.NBCAAM.org) for the specific Code of Ethics for Animal Massage and Acupressure Practitioners.

## SAMPLE QUESTIONS

1. Acupoints that are not known acupoints, yet the animal indicates a pain reaction are called:
  - a. Local or Distal points
  - b. Ashi or Trigger points
  - c. Rostral or Chi points
  - d. Calming or Jing Well
  
2. A general definition of 'ethics' involves a system of moral principles governing:
  - a. Liability
  - b. Hazardous waste
  - c. Standards of behavior
  - d. Standards of Practice
  
3. The most effective session with an animal client is when the time spent is:
  - a. Client-centered
  - b. Practitioner-centered
  - c. Owner-centered
  - d. None of the above
  
4. In regard to digestive issues, the best time to offer an acupressure session would be:
  - a. 8 – 10 pm
  - b. 7 – 9 am
  - c. 9 – 11 pm
  - d. 3 – 5 am
  
5. There are no contra-indications for an acupressure session.
  1. True
  2. False
  
6. A dog's eye is inflamed and tearing, the practitioner should:
  - a. Perform an acupressure session that includes Liv 2
  - b. Instruct the owner to wash the dog's every three hours following an acupressure session intended to reduce inflammation
  - c. Perform a very short session and suggest the owner take the dog to their veterinarian
  - d. None of the above.
  
7. When would you not offer an acupressure session?
  - a. When the animal is sick or lethargic
  - b. When the animal has just eaten or completed heavy exercise
  - c. When the animal has been out in the garden
  - d. After he has defecated and excreted urine

8. Which four acupoints are usually contraindicated during pregnancy?
- a. Bl 60, Ht 7, SI 4, LI 11
  - b. Bl 67, St 36, Sp 6, LI 4
  - c. GB 34, Bl 13, St 40, Liv 3
  - d. Ht 9, Bl 17, GB 40, Bl 40

## **Canine Pathology**

Pathology is the study of disease. The term pathogen comes from the Greek work “pathos” meaning disease. An organism capable of producing disease in an animal is referred to as a pathogen. Pathological is a term used fro a diseased condition. An understanding of pathological conditions is necessary in order for a practitioner to be able to make accurate decisions regarding an appropriate acupressure plan.

Acupressure is useful in the management of many pathological conditions because it can provide immune support, relieve muscle spasms, relieve stress, and help to diminish pain. A common disorder of many pathological conditions practitioners see is ataxia, which is uncoordinated gait. Dehydration mimics many symptoms similar to many pathological conditions of the muscular system and may show up as ataxia. The greater the understanding of canine pathology the practitioner has the better informed and intelligent their decisions will be, while staying within their specific scope of practice.

The following outline of canine pathology concepts and specifics provides students with study direction for sitting for the NBCAAM exam.

### **Canine health**

#### Vital signs

Temperature: Adult dogs is 100- 102.5F (37.7 to 39.2 C)

Heart rate: Adult dogs is 60 -120 beats per minute at rest. It is lower in larger breeds and higher in smaller breeds.

Respiratory rate: Adult dogs is 10 -30 breaths per minute. Panting is ten times faster than normal.

Dentition: Deciduous teeth erupt between 3-6 weeks of age.

Permanent teeth erupt between 2-5 months of age and usually finish erupting by one year of age. An adult dog’s mouth has a total of 42 teeth.

Mucous membranes: The normal color is pink. Examples of abnormal mucous membrane colors are pale, white, yellow, bright red and blue.

#### Preventive Health measures

Diet

Exercise

Socializing

Addressing health problems

#### Signs of Disease

Behavior

Pain

Activity level

Urination

Abdominal Size

Movement and Gait Changes

Appetite

- Water intake
  - Decreased water intake
  - Increased water intake
- Vomiting
- Diarrhea
- Respirations
  - Increased rate of breathing
  - Noisy breathing
  - Deep, forceful breathing
  - Decreased rate of breathing
- Coughing
  - Dry cough
  - Moist cough
- Weight, body condition, and hair coat

## **Emergency Conditions**

An emergency condition is defined as “a sudden or unexpected situation that calls for action without delay.” A dog in an emergency condition should receive immediate attention and medical care.

- Bites
  - Snakes
  - Insects and spiders
  - Cats / Dog bites
- Burns
  - First degree
  - Second degree
  - Third degree
- Smoke inhalation
  - Hypoxia
  - Cyanosis
- Choking
- Cold exposure
  - Hypothermia
  - Frostbite
- Heat Stroke
  - Hyperthermia
- Dehydration
- Drowning
- Acute Painful Abdomen
  - Bloat – Gastric dilation or Volvulus
- Fractures
- Wounds
  - Bleeding
  - Lacerations
  - Puncture wounds

- Shock
  - Circulatory
  - Anaphylactic
- Cardiac arrest

## **Musculoskeletal**

The musculoskeletal system consists of hundreds of bones of all sizes, connected by ligaments that stabilize the places where they meet (joints or articulations) while allowing for appropriate movement by the muscles. Skeletal system help maintain the body's shape, protect organs and bear weight but they are also an integral part of the physiology of the body.

### Bones and Joints of the body

- Types of joints in the body

- Fibrous joints
  - Cartilaginous discs
  - Synovial joints

- Osteoarthritis
  - Immune-mediated arthritis
  - Osteochondrosis
  - Panosteitis
  - Hip Dysplasia
  - Elbow Dysplasia
  - Luxating Patella
  - Spondylosis
  - Hypertrophic Osteodystrophy
  - Osteomyelitis

### Muscle Diseases and Conditions

- Types of muscles

- Cardiac
  - Smooth
  - Skeletal

- Myopathy

- Traumatic Myopathy
  - Exertional Myopathy or Rhabdomyolysis
  - Muscular Dystrophy

- Metabolic Muscle Disorder

- Junctionopathis

- Myasthenia gravis

- Myositides

- Masticatory myositis
  - Polymyositis

## **Nervous System**

The nervous system receives stimuli from the environment within and without the body, and then activates responses, whether muscular reflexes, conscious movement, or the release of hormones which directs organs to act.

#### Two Levels of the Nervous System

- CNS

- PNS

#### Primary Signs of Nervous system conditions

- Behavioral changes, pain, tremors, ataxia, paralysis and unconsciousness

#### Head Injuries

#### Seizure Disorders

- Epilepsy

#### Spinal Cord Diseases

#### Intervertebral Disc Disease

#### Wobbler Syndrome (Caudal Cervical Spondylomyelopathy)

#### Cauda Equina Syndrome (Degenerative Lumbosacral Stenosis)

#### Degenerative Myelopathy

## Eyes

Dogs have detailed binocular vision, with excellent depth perception. The dog's eyes have evolved to allow them to remain active both day and night, and under varying climatic conditions.

#### Eyelid diseases

- Blepharitis

- Conjunctivitis

- Keratitis

  - Infectious

  - Interstitial

  - Vascular

- Keratoconjunctivitis Sicca

#### Corneal Diseases

- Corneal Abrasion

- Corneal Ulcer

- Uveitis

#### Lens Diseases

- Cataracts

- Glaucoma

#### Retinal Degeneration

- Progressive Retinal Atrophy

- Retinal Detachment

## Ears

Ears are organs of hearing and balance. Most dogs hear four times better than the average person especially in higher frequencies. Dogs rely on their hearing more than sight in responding to their environment.

Organ of hearing and balance

Outer ear

Middle ear

Inner ear

Deafness

Congenital

Acquired

Ear infections

Otitis externa

Otitis media

Otitis interna

## **Skin**

The skin is the largest organ of the body providing waterproof, breathable, elastic protection as well as vital physiological functions. The skin helps balance oxygen intake and is important in removing toxins from the body.

Basic layers

Epidermis

Dermis

Subcutis

Allergies

Atopy

Flea Allergy Dermatitis

Allergic Contact Dermatitis

Food Allergy

Acute Moist Dermatitis

Lick Granuloma

## **Gastrointestinal System**

The digestive system includes the digestive tract and its associated organs, especially the pancreas, gall bladder and liver. Its primary function is to digest food through processes of secretion, absorption, motility and elimination of waste.

Normal Functions and physiology

Gastrointestinal and Esophageal Obstruction

Megaesophagus

Hemorrhagic Gastroenteritis, Acute Infectious Enteritis

Pancreatitis

Liver Failure

Hepatitis

Inflammatory Bowel Disease

Anal Sac Disease

## **Cardiovascular System**

The cardiovascular system includes the heart, and blood vessels of all sizes. Its purpose is to distribute oxygen-containing blood to cells throughout the body while removing wastes from the cells to the lungs, kidney and liver. Blood also transports hormones, glucose and electrolytes and other life supporting compounds to each cell.

Normal cardiovascular anatomy and physiology

Cardiac arrhythmias

Heart Failure

Valvular Heart Disease

Congenital Heart Disease

    Patent Ductus Arteriosus

    Pulmonic Stenosis

    Aortic Stenosis

Bacterial Endocarditis

Dilated Cardiomyopathy

Anemia

## **Respiratory System**

The respiratory system consists of a system of flexible, branching tubes that connect the outside environment with the blood circulatory system.

Normal functions and physiology

Infections

    Kennel Cough

    Rhinitis

    Chronic Bronchitis

    Pneumonia

        Aspiration, inhalation, chemical, fungal

Pulmonary Edema

Brachycephalic Syndrome

Laryngeal Paralysis or Vocal Chord Paralysis

Tracheal Collapse

## **Urinary System**

The urinary system is made up of the kidneys, ureters, bladder and urethra. The kidneys regulate fluid, electrolyte, and acid base balance and collect the wastes of metabolism. The urine is transported to the bladder and the bladder collects the urine until the dog urinates or empties its bladder.

Normal functions and physiology

Symptoms/signs of urinary tract disease

Kidney disease

    Function of the kidneys

- Renal failure
  - Acute kidney failure
  - Chronic kidney failure
- Glomerulonephritis
- Glomerulonephrosis
- Pyelonephritis
- Urinary Bladder Disease
  - Cystitis
  - Urinary Incontinence
  - Uroliths

## **Endocrine System**

The endocrine system is comprised of glands that release hormones into the bloodstream or lymphatic system. Glands are a grouping of specialized cells that create and secrete substances serving a bodily need.

- Normal function and physiology
- Diabetes Mellitus
- Hypothyroidism
- Adrenal diseases
  - Addison's disease (Hypoadrenocorticism)
  - Cushing's Syndrome (Hyperadrenocorticism)

## **Reproductive System**

The reproductive system consists of the group of organs that produce offspring and regulatory centers in the brain that control hormone production relating to the function of the sex organs.

- Normal function and physiology
- Prostate disease
  - Benign Prostatic Hyperplasia
  - Prostatitis
  - Abscesses
  - Cysts
- Cryptorchidism
- False Pregnancy (Pseudocyesis)
- Pyometra
- Vaginitis

## **Zoonotic Diseases**

A zoonotic disease is one that is transmissible from the animals to humans, through pathogens such as bacteria, viruses, parasites, fungi or other infectious agents.

- Understanding a zoonotic disease
- Rabies
- Brucellosis

Leptospirosis

Salmonellosis

Giardiasis

Internal Parasites

Roundworms, Hookworms, Tapeworms, and Threadworms

## **Infectious Diseases**

Viral Infections

Canine Distemper

Canine Herpesvirus

Infectious Canine Hepatitis

Canine Parvovirus

Bacterial Infections

Bordetella

Tetanus

Lyme Disease

Salmon Poisoning Disease

Fungal Infections

Aspergillosis

Blastomycosis

Coccidioidomycosis

Ringworm

Sporotrichosis

Protozoal Disease

Protozoan

Babesiosis

Giardiasis

## **Parasites**

Parasites are animals or plants that live on or in another being from which they get their food, always at the expense of the host.

Internal Parasites

Heartworm

Intestinal Parasites

Hookworm/ Ancylostoma

Roundworm/Ascarids

Tapeworm/ Cestodes

Whipworm/ Trichuris

Threadworm/ Strongyloides

External Parasites

Fleas

Lice

Mites

Cheyletiellosis, Chiggers, Demodectic mange and Sarcoptic mange

Ticks

Brown dog tick, and American dog tick

## **Environmental Hazards**

Foreign bodies

Gastrointestinal, eyes, ears, nose, throat, larynx, and lungs

Poisons

Antifreeze

Rodenticides

Poison baits

Insecticides

Petroleum products

Plants

Chocolate and Cocoa

Raisins and Grapes

Garbage poisoning

## **Cancer**

Cancer is a complex disease defined as a change in the normal replication or growth of cells that tends to destroy healthy tissue and organs.

Carcinoma

Squamous cell carcinoma

Leukemia

Lipoma

Lymphoma

Melanoma

Sarcoma

Osteosarcoma

Chondrosarcoma

Fibrosarcoma

Hemangiosarcoma

Prevention and reducing risk

## **Medication Concerns**

Medication overdose

Antibiotics

Analgesics

Corticosteroids

Anesthetics

Recreational drugs

Opiates

Vaccines