

Chapter Two: Zang-Fu Organ Systems

Chapter Two Overview

In Chapter two you will learn about the functions of the 12 Zang-Fu (Yin and Yang internal organs). It is important to know how they function in the body as well as the types of syndromes they are susceptible to. Many of the functions of these organs are similar to those of Western medicine, however some are very different when viewed from a Traditional Chinese medicine perspective. Please try to keep an open mind and read the material carefully. *Study tip: you may want to take notes on the different types of Qi and each of the Zang-Fu organs and their attributes for future study.*

We have suggested some acupressure points to help with each of the syndromes mentioned. The points are ones that are used for these conditions in humans so in a few cases, the points mentioned may not be safe to use on a dog due to the location. And in other conditions it truly is an emergency and a vet is needed rather than an acupressure practitioner.

When there is a cold syndrome the strategy for dealing with it is to warm the dog up. One of the ways to accomplish this is to use moxa. Moxa is an herb with warming properties. It is dried mugwort that often comes rolled up like a cigar. It can be lit and held over acupressure points to send warmth down into the body. We will demonstrate this during the practical.

Introduction to the Lung

The Lung known as **Fei**, along with the Spleen, is one of the primary organs for creating Postnatal or Acquired Qi in TCM. It sits in the upper Jiao alongside the Heart, and is primarily responsible for the function of respiration, as well as for the creation and transportation of pure Qi and fluids to every part of the body, but in particular, to the skin and coat. The Lung system in TCM includes the lungs, the nose, the sinus passages, the throat, the vocal chords, the skin and coat.

It is paired with the Large Intestine system and both organs belong to the Metal element. Of these two organ systems within the Metal element, the Lung is the Yin organ (the Zang) and the Large Intestine is the Yang organ (the Fu).

The Metal element is all about letting go of the old to make room for the new. This can be thought of on different levels for example in the case of Lung function, we need to exhale and release CO₂ in order for the Lungs to be able to inhale and bring O₂ to the cells and the tissues of the body. The Large Intestine needs to empty (defecation) in order to make room

for more waste products to be able to move through.

On an emotional level, the Metal element represents the ability to let go of negative or harmful emotions that could potentially damage healthy balance if not released. One of the fundamental differences between Chinese medicine and Western medicine is the acknowledgment that emotional and physical health are not just interrelated, but are inseparable. We mentioned earlier that each organ system has an area of influence that includes not only responsibilities for certain physiological functions but also an affiliation for a particular emotion. A tendency to a prolonged emotional state will affect the physiological functioning of the organ to which the emotion is attached, just as a weakening or stagnation of the Qi of a particular organ system will have an effect on the emotional state with which it is associated.

The emotion associated with the Metal element is grief. Grief is a normal and appropriate emotion in response to a separation or a bereavement. Appropriate expression of grief will cause no harm to the body and its functioning. In fact, a healthy release of sadness in response to a major loss allows new healthy attachments to happen. Recurring or prolonged periods of grief caused by abandonment or bereavement may cause an imbalance in the Metal element that may be powerful enough to effect the healthy physiological functioning of the Lung and Large Intestine.

Think about abandoned or shelter animals, or animals whose companions have died or who have been handed over from owner to owner - in any of these cases, prolonged sadness or insecurity associated with abandonment may lead to problems within the Lung or the Large Intestine functioning.

The Lung's Areas of Influence

The Lung influences a number of areas of the body, including:

1. It governs respiration and aids in the formation of Qi
2. It descends and disperses Qi
3. It disperses fluids and regulates the water passages
4. It governs the exterior of the body (the immune system and the skin)
5. It opens into the nose and manifests in the skin and coat

1. It governs respiration and aids in the formation of Qi

On a physical level, each Zang and Fu organ has an “area of influence” which can include many obvious as well as some not so obvious aspects of physiological functioning and responsibilities. As in Western medicine, in TCM respiration is also the main physical function of the Lung system. During respiration, the Lungs bring pure or clean Qi (O₂) into the body via inhalation and discharge impure or dirty Qi (CO₂) from the body via exhalation.

The Lungs work together with the Spleen system to create a constant source of new and pure Qi to aid every aspect of the body's functioning. This is done in the following ways; the Spleen and Stomach take in food and drink and the digestive process begins to separate the digestate into usable Qi and waste Qi. The waste (impure Qi) is sent to the intestines and bladder for further separation and/or elimination. The usable extract of the digestive process, called Gu Qi, is sent by the Spleen up to the Lungs. The Gu Qi from the Spleen is combined with the pure Qi that has been extracted by the Lungs from clean air during inhalation, and together these two pure extracts form Zong Qi, also known as Chest Qi.

Zong Qi gathers and resides in the chest and is the fuel behind the Lung's primary functions of respiration, creating new Qi, dispersing Qi and fluids to all areas of the body and regulating the exterior of the body.

Therefore, if the Lung Qi or Zong Qi is deficient, some or all of these functions may not work as efficiently, resulting in symptoms that may include shortness of breath, weakness and lethargy, a presence of phlegm or fluid in the lungs, weakened resistance to disease (poor immune function).

Whereas Zong Qi specifically remains in the chest and enables the Lungs to function normally, there is another form of Qi that is created from the combination of Gu Qi and fresh air. This is called Zhen Qi or Upright Qi. It is this Qi that is responsible for fueling the proper functioning of all cells, organs, and tissues of the body. The Zhen Qi can be further divided into two aspects - Ying Qi (Nutritive Qi) and Wei Qi (Protective or Defensive Qi).

Ying Qi or Nutritive Qi, as it's name implies, runs in the meridians and has a moistening and nourishing function.

Wei Qi or Protective Qi (also called Defensive Qi), runs in the space between the skin and the muscles and protects the body against invasion from environmental pathogenic factors (EPF's).

The creation of Wei Qi and its role of defending the body against invasion is an important function of the Lung system and will be discussed more below.

2. It descends and disperses Qi

Each Zang and Fu organ has a direction, the correct and healthy way the Qi of that particular organ system flows. If the Qi of a particular organ goes in the opposite direction, it is called a rebellion, or a counterflow. Qi rebellion causes particular pathological symptoms according to the Zang or Fu affected. The direction pertaining to the Lung is downwards. When we humans, as well as animals, breathe in, our Lung Qi descends, filling our lungs with air. If the Qi rebels, or counterflows, the symptom we experience is a cough. In dogs and cats we sometimes see "reverse sneezing".

When the Lung Qi descends, it goes to the Kidneys, which reside in the lower Jiao. The Kidneys in turn "grasp" or anchor the Lung Qi, allowing the dog to take a full breath - in the case of humans, think belly breathing - something which animals have an easier time doing. If this process is interrupted either because the Lung Qi is not strong enough to descend all the way, or because the Kidney Qi is not strong enough to anchor the Lung Qi, the connection between the Lung and the Kidneys is broken and any one or a combination of the following symptoms may result: shallow breathing or panting, inability to take a deep breath, stuffiness in the chest, coughing, wheezing, asthma.

As well as descending Qi, the Lung disperses Zhen Qi to all areas of the body including the more superficial structures of the body like the skin and the coat. This ensures proper functioning of all the organs, the cells and tissues of the body. Failure of the Lung Qi to disperse Zhen Qi will lead to symptoms that may include: weakness or malfunction of any of the Zang and Fu organs, skin disorders including patches of dry or flaky skin, dull coat, patches of alopecia.

3. It disperses fluids and regulates the water passages

In addition to dispersing Qi all over the body, another of the Lung's functions is to disperse body fluids and regulate the water passages. The Lungs reside in the upper Jiao and they collect fluids that have been brought in the form of Gu Qi from the Spleen. The Lungs further separate the fluids received from the Spleen and send the impure part down to the Kidneys and the Urinary Bladder for more separation and/or excretion, and circulate the purer fluids, in the form of a light vapor, to nourish the area just beneath the skin, the muscles and the interior of the body. If this movement of fluids between the Spleen, Lung and the Kidneys (the three organs of water metabolism) or between the Lungs and the outlying parts of the body is compromised because the Lung Qi is weak or because there is blockage, then fluids will stagnate. This occurs mainly in the chest, and will further obstruct the descending and dispersing function of the Lung, leading to one or a combination of the following symptoms: stuffy chest causing panting, cough (rebellion of Lung Qi) with a presence of phlegm and the

sound of fluids in the chest, sinus congestion and pressure, runny nose, pockets of edema, especially in the upper body, obstructed urination.

4. It governs the exterior of the body (the immune system and the skin)

A major function of the Lung Qi is to protect the animal from an invasion of external pathogenic factors (EPF's). EPF's are the equivalent of viruses or bacterial infections. The Lung is the uppermost Zang as it is the organ that is closest to the head (and to heaven) - it can be seen as the lid of the Yin organs - and because it is in direct contact with the environment via the opening of the nose and the skin, it is the organ that is the most easily invaded by the external pathogenic factors and thus warrants the name 'the delicate organ.'

It governs the immune system in the following ways:

- a) It has a direct connection with the skin. The skin is seen as an extension - an external manifestation - of the Lung system and it is here that the functions of the Lungs come together to form a barrier between the internal and the external environment.
- b) The Lung moistens and nourishes the skin and disperses Wei Qi to circulate just beneath the skin level to warm it.
- c) It influences the opening and closing of the pores, causes sweating and in this way releases pathogens.
- d) If the Lung Qi, and subsequently the Wei Qi, is weak, the function of dispersing Qi and fluids to the exterior of the body will be compromised and pathogens will be more likely to invade.
- e) As we have seen, Zhen Qi is the Qi that is the basis of all physiological processes and is made up of the nourishing Ying Qi that flows in the meridians and the protective Wei Qi that flows just beneath the skin (see previous section). The Wei Qi has the function of protecting or defending the body from invasion of EPF's (viruses, bacterial infections from an external source). It is essential in temperature regulation by its ability to influence the opening and closing of the pores thereby releasing heat from the skin, as well as warming the skin and the muscles. In TCM most EPF's gain access to the body via the skin or the nose and then penetrate deeper to the muscle layer. By circulating just below the skin, the Wei Qi forms a barrier to the outside environment, keeping the interior of the body protected from invasion. This protective process is under the influence, and therefore is dependent on the health of the Lung Qi.

It follows, then, that a blockage and/or a deficiency of Lung Qi may cause one or more of the following symptoms: poor immune function leading to frequent upper respiratory infections, allergies, skin disorders, poor temperature regulation and sinus congestion.

5. It opens into the nose and manifests in the skin and coat

The nose is the opening of the Lung system and provides a pathway for proper respiration. If the dispersing function of the Lung is weak, causing a lack of fluids to moisten the nose and throat, it may result in dryness, inflammation of the mucus linings or congestion.

The health of the Lung Qi is reflected in the luster and moisture of the skin and the coat. A brilliant shiny coat is a sign of strong Lung Qi and its ability to disperse Qi and fluids to the exterior of the body, the skin and the coat. Conversely, a weakness in this aspect of the Lung system's function may cause one or a combination of: a dull or patchy coat, dry and flaky skin, skin diseases and infections.

Lung Syndromes

Diseases or syndromes of the Lung system can be divided into excess and deficiency. Excess syndromes tend to be acute in nature while deficiency syndromes tend to be more chronic.

The excess Lung syndromes include:

1. Invasion of the Lungs by Wind Cold
2. Invasion of the Lungs by Wind Heat
3. Accumulation of Phlegm Damp in the Lungs

The deficiency Lung syndromes include:

1. Lung Qi deficiency
2. Lung Yin deficiency

Excess Syndromes of the Lung

1. Invasion of the Lungs by Wind Cold

Etiology:

An invasion of Wind Cold may arise if the Wei Qi is either temporarily deficient, or if the External Pathogenic Factor is particularly strong, strong enough to overpower the animal's immune system. Reasons for weak Lung or Wei Qi can include poor nutrition, a constitutional tendency to weak Lung Qi, over-breeding, overexertion, prolonged exposure to a windy or cold environment.

In TCM the Wind Cold attacks the body through the skin at the neck and upper back, causing stiffness and tight muscles, so points to address this syndrome are commonly used in this area.

Symptoms:

A Wind Cold invasion can be as simple as a mild upper respiratory tract infection affecting a cat or dog, or can be seen as acute seasonal or environmental allergies. Acute kennel cough could also come under this category. The Wind Cold blocks the descending and dispersing function of the Lungs (of both the Qi and the fluids) causing symptoms in the dog or cat of a runny nose and/or eyes with a clear watery discharge, sneezing, cough.

The Lung Qi is temporarily compromised causing lethargy and as the circulation of the Wei Qi is blocked, there will be more of a need for warmth than usual. The animal may be more clingy, wanting to snuggle closely or be under a blanket. He will likely sleep in a curled position.

The pulse may be slightly slow and feel full with a tight feeling. The tongue may be bluish in color as the cold slows down the circulation of blood, so it looks a little cyanotic.

Session principle:

Release the Wind Cold and strengthen the Wei Qi and Lung Qi

Points to use:

To release the Wind Cold, stimulate LU 7 and LI 4

To open the nose and relax the neck, stimulate GB 20

To release the Wind Cold and relax the neck and upper back, stimulate DU 14, UB 12, UB 13

UB 13 can also be used to strengthen the Lung Qi as it is the Association point of the Lung

2. Invasion of the Lungs by Wind Heat

Etiology:

The etiology can be the same as for a Wind Cold, but Wind Heat invasions are usually more serious, bringing fever and inflammation. Heat can do damage to the delicate tissue and mucus membranes of the Lung, throat and nose.

Symptoms:

The Wind Heat blocks the descending and dispersing function of the Lungs (of both the Qi and the fluids) causing symptoms in the dog or cat of a runny nose and/or eyes with a thicker possibly greenish discharge, sneezing, cough. The hot pathogen causes the animal to be restless or even more aggressive or at least more irritable than usual and there will be increased thirst, fever and inflammation than in the case of a Wind Cold. He will feel hot to the touch and the nose will be dry and he will pant more than usual. Since he is feeling sick, there will be an instinctual need for energy conservation, so he will likely be lethargic. He may be repelled by your body heat and will likely sleep in an outstretched position.

The pulse will be more rapid than usual and the tongue will be red and dry.

Session principle:

Clear the Wind Heat and strengthen the Wei Qi and the Lung Qi

Points to use:

To clear Wind and Heat, stimulate DU 14, LI 11, SJ 5, ST 44, the Jing Well points

To strengthen the Lung Qi stimulate UB 13, UB 20

3. Accumulation of Phlegm Damp in the Lungs

Etiology:

Either a prolonged Wind Cold or a poor diet rich in cold raw foods or energetically cold natured foods can cause the accumulation of Phlegm in the Spleen, Stomach and Lungs. Phlegm Damp accumulation will block the Lung Qi's ability to descend and disperse fluids

producing a cough of foamy or white mucus.

Symptoms:

The inability of the Lung Qi to circulate in the chest due to the presence of Phlegm will cause labored breathing. The dog will be easily fatigued and may show a reluctance to exercise. As the Lung Qi is deficient and is under extra stress, the dog may exhibit a need to sleep more and may have a reduced appetite and thirst due to the presence of Phlegm. Listening to the Lungs may reveal a rattling sound.

Session principle:

Transform the Phlegm and resolve Damp, strengthen and descend the Lung Qi

Points to use:

To open the chest and descend the Lung Qi, stimulate Ren 17, LU 1, LU 7

To transform the Phlegm, stimulate SP 3, ST 36, ST 40, Ren 12

To strengthen the Lung Qi, stimulate UB 13, UB 20

Deficiency Syndromes of the Lung

1. Lung Qi deficiency

Etiology:

The Lung Qi can become weakened over time by the natural aging process, prolonged exposure to irritating allergens, poor diet, too much physical activity, a constitutional tendency to weak Lungs or inappropriate or prolonged separation or grief. As the health of the Lung depends on the correct functioning of the Spleen and Kidney, weakness of these organs may also compromise the functioning of the Lung system. Recurrent invasions of Wind Cold and/or Wind Heat will also weaken the Lung Qi and Wei Qi, leading to a cycle of further invasions of External Pathogenic Factors and further weakening of the Lung Qi.

Symptoms:

As the function of the Lung system includes dispersing and descending of Qi and fluids,

creating Zhen Qi and Wei Qi, protecting the body against disease and influencing the skin and coat, it follows that if the Lung Qi becomes weak due to any or a combination of the factors above, malfunctions may occur in any one, or a combination, of these areas of influence. This may give rise to symptoms that include: seasonal (perhaps during the Fall which is the season of the Metal Element) or perennial allergies, recurrent colds or upper respiratory tract infections, breathing problems, congestion, dry mucus membranes, dry flaky skin, dull and unhealthy looking coat, skin infections and allergies, lethargy, depressed affect, reduced stamina, reluctance to exercise.

Session principle:

Strengthen Lung Qi

Points to use:

To strengthen the Lung Qi, stimulate LU 1, LU 9, ST 36, UB 13

To strengthen the Lung Qi by strengthening the Spleen (mother of the Lung on the 5 element Creation cycle), stimulate ST 36, SP 6, SP 3, UB 20

To strengthen the Lung/Kidney connection for shortness of breath, stimulate KID 3, KID 6, UB 23

2. Lung Yin deficiency

Etiology:

The Yin forms the structure and the moisture of the body and a deficiency of Lung Yin can mean anything on a spectrum from damage to the fluid of the Lungs to damage to the actual lung tissue. The Lung Yin can become weakened over time by the natural aging process, dehydration, prolonged exposure to irritating allergens, prolonged exposure to a hot and dry environment, poor diet - too rich and/or toxic foods, too much physical activity - especially in hot and dry weather, a constitutional tendency to weak Lungs or inappropriate or prolonged separation or grief. Recurrent invasions of Wind Heat will also burn up the Yin of the Lungs.

Symptoms:

If the Yin of the Lungs becomes compromised for one or a combination of factors listed above, this may result in symptoms that include chronically dry mucus membranes in the nose, dry and chronically irritated throat and lungs, dry and lusterless coat, dry and flaky skin, recurrent dehydration, restlessness, unusual thirst, a chronic dry cough.

Session principle:

Nourish the Yin of the Lungs and clear Heat

Points to use:

To nourish the Yin of the Lungs, stimulate LU 9, LU 7, KID 6, SP 6, UB 13

To clear heat from the Lung, stimulate LU 5, LI 11, DU 14

Introduction to the Large Intestine

The Large Intestine known as **Da Chang**, along with the Urinary Bladder is one of the organs whose main function is excretion of waste products. It receives food from the Stomach and the Small Intestine, absorbs fluids and excretes the impure Qi. It sits in the lower Jiao along with the Urinary Bladder and according to some sources, the Liver. It is paired with the Lung system and both belong to the Metal element. Of these two organ systems within the Metal element, the Large Intestine is the Yang organ (the Fu) and the Lung is the Yin organ (the Zang).

As we saw in the description of the Lung, the Metal element is all about letting go of the old to make room for the new. Nowhere is this responsibility clearer than in the function of the Large Intestine. As with the Lung, on an emotional level, the correct functioning of the Large Intestine can be affected by sadness and worry especially in relation to abandonment or bereavement. The Large Intestine needs to empty (defecation) in order to make room for more waste products to be able to move through. Constipation or diarrhea as a result of worry or insecurity can be physical symptoms of the Large Intestine related to emotional imbalances.

The Large Intestine's Areas of Influence

On a physical level, each Zang and Fu has an “area of influence” which can include many obvious as well as some not so obvious aspects of physiological functioning and responsibilities. The Zang organs have greater areas of influence than the Fu.

The Large Intestine has one main area of influence:

1. It receives the impure part of the digestive process from the Small Intestine and descends it. It absorbs some fluid which goes back into circulation, and excretes the rest as waste.

Large Intestine Syndromes

Diseases of the Large Intestine system can be divided into excess and deficiency syndromes. Excess syndromes tend to be acute in nature while deficiency syndromes tend to be more chronic.

Excess syndromes of the LI system:

1. Cold invading the LI
2. Damp Heat invading in the LI
3. Heat obstructing the LI

Deficiency syndromes of the LI system:

1. Dryness in the LI

Excess Syndromes of the Large Intestine

1. Cold or Cold Damp invading the LI

Etiology:

This is a sudden acute invasion directly to the LI by cold raw food or liquids, or energetically cold natured food. Food or bones directly from the freezer, or raw foods can cause this, especially in older dogs and cats, who may require supplementation to the fire of their digestive system or who may need to have food warmed slightly before ingesting. The cold contracts the LI and damages the ability of the large intestine to absorb fluid, therefore causing a downpour of watery diarrhea.

Symptoms:

The cold contracts the LI and causes painful cramping, sudden uncontrollable diarrhea. The dog or cat will feel cold and shivery inside and will therefore seek warmth. They may or may

not resist touch or pressure to the abdomen. They will likely have a loss of appetite and become lethargic. If the diarrhea persists, dehydration may occur.

Session Principle:

Regulate the LI and dispel the cold

Points to use:

Stimulate points to regulate the intestines – ST 25, ST 36, UB 25

Stimulate points to warm the cold - moxa DU 14, SI 3, UB 20, UB 22, UB 25

2. Damp Heat invading in the LI

Etiology:

Similar to the invasion of cold damp to the LI, this syndrome is due to inappropriate diet, including food that is either toxic or energetically too rich for the animal's digestive system. The toxic nature of the food creates heat in the LI, which mixes with the fluids already present in the LI system and causes loose stools with a foul smell as a result of the heat. A chronically inappropriate diet may cause a prolonged build up of dampness in the large intestine which interferes with its absorption function leading to mucus in the stools. If there is chronic heat in the stools from the owners poor dietary choices, it can mix with the dampness and create blood as well as mucus in the stool. The heat causes the blood to escape from the vessels and leak into the gut. The heat and the dampness together cause irritation and inflammation of the mucus lining of the LI and the rectum and anus, causing irritation and visible swelling and redness around the anus.

Symptoms:

Acute or chronic foul smelling diarrhea with or without a presence of blood and/or mucus. Restlessness, possible increased thirst, visible irritation, swelling and inflammation of the anal tissue.

Session Principle:

Resolve Damp and Heat in the LI

Points to use:

Stimulate points to resolve Dampness – SP 9, SP 6, ST 37, UB 25

Stimulate points to clear Heat – LI 11, ST 44, UB 40

3. Heat obstructing the LI

Etiology:

This syndrome causes constipation and can arise as a result of either a prolonged fever drying up the fluids in the LI, or from heat generated from toxic foods, in which case there may be constipation. Some pain medications can also cause heat in the Stomach and LI which dries up the mucus membrane and causes the feces to become stuck. The more obstructed the fecal matter becomes, the more frictional heat gets generated causing further blockage.

Symptoms:

Heat generated in the Large Intestine dries up the lubricating fluid causing constipation, with or without thirst, fever, inflammation around the anus, red tongue, rapid pulse, restlessness and agitation, bad breath, either increased or decreased appetite.

Session Principle:

Clear Heat from the Intestines

Points to use:

Clear Heat and move the stool by stimulating – LI 11, Jing-well points, SJ 6, ST 25, UB 25, ST 37

Protect the Yin by stimulating – SP 6, KID 6, ST 36

Deficiency Syndromes of the Large Intestine

1. LI Dryness

Etiology:

This is not unlike a Yin deficiency pattern and arises as a result of the natural aging process,

prolonged bouts of constipation, prolonged diarrhea which has exhausted the fluids of the LI, a prolonged diet with foods of an energetically hot nature and/or prolonged environmental exposure to Heat and Dryness. It is a chronic condition and is therefore seen as a deficiency syndrome and can be differentiated from the previous syndrome by its long term nature.

Symptoms:

The deficiency of Yin in the LI creates chronically small, dry and difficult to pass stools. The Dryness may also manifest in the tongue and the mucus membranes of the digestive system. The skin and coat may be dry, itchy and flaky. Other possible associated symptoms of this syndrome include: thirst, restlessness, muscle wasting, increased appetite, and dry eyes.

Session Principle:

Nourish the Yin to move the stool

Points to use:

Stimulate points to moisten and nourish the Yin – SP 6, KID 6, SJ 6

Move the stool – LI 11, LI 4, ST 25, ST 37

Introduction to the Stomach

The Stomach known as **Wei**, along with the Spleen, is one of the organs whose main function is digestion. The transformation process begins in the Stomach, which is said to ‘rot and ripen’ food and drink. The usable part of the resulting digestate goes to the Spleen to be further transformed into Gu Qi and Blood and the impure part descends directly to the Intestines for further separation and eventually elimination. The role of the Stomach in the beginning of the process of Qi and Blood creation, earns it the title as the “most important Fu” in the body, as well as its name - “the root of Post Heavenly Qi.” It is also sometimes referred to as the “Sea of Food and Fluid”, or “the Sea of Grains and Water”.

It sits in the middle Jiao along with the Spleen and, according to some sources, the Liver. It is paired with the Spleen system and both the Stomach and Spleen belong to the Earth element. Of these two organ systems within the Earth element, the Stomach is the Yang organ (the Fu) and the Spleen is the Yin organ (the Zang).

As we will see in the description of the Spleen system, the Earth element represents giving and receiving nourishment. As with the Spleen, on an emotional level, the correct functioning of the Stomach can be affected by over-thinking, obsession, and worry, especially in relation to food, as well as inconsistent and/or poor quality nutrition.

Because of its relationship with creating Postnatal (or Acquired) Qi, which nourishes all the other organ systems, it follows that if the Stomach Qi is weakened by any of the etiological factors seen below, this may result in poor functioning of any of the Zang and Fu, as well as specific symptoms of fatigue, lethargy, poor digestion or diseases of the digestive system.

Each of the Zang and Fu has a particular directional force, which, if interrupted can cause 'rebellion or counterflow.' The stomach has a descending function and if, for reasons of obstruction or deficiency, the Qi of the stomach rebels, this manifests as vomiting or hiccups.

The Stomach's Areas of Influence

As we have seen, each Zang and Fu has an "area of influence" which can include many obvious as well as some not so obvious aspects of physiological functioning and responsibilities.

The Stomach has the following areas of influence:

- 1) It controls the 'rotting and ripening' of food
- 2) It controls the descending of Qi
- 3) It controls the transportation of food
- 4) It is the origin of fluids

1) It controls the 'rotting and ripening' of food

The first stage of digestion begins in the Stomach which receives food and drink and begins the process of separation into pure and impure Qi. This process is called 'rotting and ripening' and, as implied, this means a breakdown or fermenting of all ingested materials before part of it is descended to the Spleen and another part to the Intestines. Sometimes, with this process in mind, the middle Jiao is referred to as a 'bubbling cauldron'. If this particular function of the Stomach is compromised, food will not be digested properly, leading to stagnation of food and/or fluids in the middle Jiao. This may create symptoms that include bloating, pain, belching and undigested food.

The intimate connection between the Stomach's function of rotting and ripening and the creation of Postnatal Qi, means that if this function is not working properly, the other organs will become malnourished and their functioning will become compromised. As we have said, this earns the Stomach the title of the most important Fu. Sometimes the Stomach is also

referred to as the 'Sea of Water and Grains.' When an animal has been chronically sick, it is important to always include treatment of the Stomach and Spleen Qi as part of the recovery plan.

2) It controls the descending of Qi

The Stomach Qi descends down to the Intestines and if this mechanism fails, either because of a deficiency of Qi, or because the Stomach Qi is blocked (usually by ingesting too much food, too many rich or cold foods, or by the Qi of the Liver stagnating), the Stomach Qi may rebel, causing vomiting, nausea, hiccups, and bloating.

3) It controls the transportation of food

As we have seen, the Stomach Fu works closely with the Spleen Zang to aid the digestive process and to create new Qi and Blood. It is also closely connected to the Spleen's function of transporting the refined part of the digestate, the pure Qi, all over the body including in particular, the muscles. If the Stomach Qi has been weakened, this may result in fatigue, weakness of the limbs or lameness.

4) It is the origin of fluids

Part of the digestate that is extracted by the Stomach is refined into fluids which nourish the body. The Stomach is itself dependent on these fluids to fulfill its functioning. For this reason it is said to 'dislike dryness' (in comparison, the Spleen is said to 'dislike dampness'). If we think of the fluids (the Yin) as a lubricant, if the Stomach is too dry (Stomach Yin deficiency), its Qi will not be able to descend the food down to the Intestines for further processing, causing constipation with small dry stools. As we have seen, a deficiency of Yin can lead to heat, and in this case, Yin deficiency Heat in the Stomach may lead to symptoms of either a poor appetite or a desire to eat often, but only small amounts (because the Stomach is in deficiency, so cannot digest properly). The Dryness and Heat will also lead to thirst.

Stomach Syndromes

Diseases of the Stomach system can be divided into excess and deficiency syndromes. Excess syndromes tend to be acute in nature while deficiency syndromes tend to be more chronic.

Excess syndromes of the Stomach system:

- 1) Stomach Fire
- 2) Stomach Qi rebellion
- 3) Cold invading the Stomach
- 4) food stagnation

Deficiency syndromes of the Stomach system:

- 1) Stomach Qi deficiency
- 2) Stomach Yin deficiency

Excess Syndromes of the Stomach

1) Stomach Fire

Etiology:

This is a common syndrome that arises from either ingesting too much hot natured foods or from chronic food stagnation (see below). It can also arise as a result of hot natured medication or from a disease that has presented with a high fever.

Symptoms:

The excess Heat in the Stomach burns up the delicate fluids (Yin) and dries out the mucus membranes causing excessive thirst, constipation, more hunger, panting, restlessness or aggression. The dog's gums may be swollen (the Stomach channel goes to the gums) and/or red and bleeding. There may be Stomach ulcers and there may be foul smelling breath. The dog will stretch out and seek a cool place to rest and will be repelled by body heat or any other kind of heat.

Session principle:

Clear Heat from the Stomach, nourish (or protect) the Yin

Points to use:

To clear Heat from the Stomach, stimulate LI 11, ST 44, Ren 12, DU 14,

To nourish (or protect) the Yin, stimulate SP 6, KID 6, ST 36, UB 21, UB 23

2) Stomach Qi rebellion

Etiology:

This condition describes a counterflow of Stomach Qi, which should descend. It can arise for reasons including the following; Stomach Qi deficiency where the Stomach Qi is not strong enough to descend; Stomach Yin deficiency where there is not enough fluid in the Stomach for proper digestion, so the Qi rebels; however, the most common reasons, include either a stagnation of Heat, Cold or food in the Stomach which blocks the normal descent of Stomach Qi. Stagnation of Cold may arise as a result of cold natured foods, food directly from the fridge, as well as too many raw foods. Stagnation of Heat and food arises from overeating or the ingestion of too many rich or undigestible foods.

Symptoms:

The Qi of the Stomach rebels for reasons listed above, resulting in belching, nausea, vomiting or hiccups. If the reason for the rebellion is Cold, there likely will be a history of ingestion of cold or raw food which has overwhelmed the Stomach Qi. Associated symptoms may include watery diarrhea, a need to stay warm, shaking or shivering.

If the rebellion is due to Heat, the main symptoms of rebellion may be associated with heat signs including panting, thirst and the dog may seek a cool spot to lie outstretched.

Session principle:

Descend Stomach Qi and regulate the Stomach

Points to use:

To descend Stomach Qi, stimulate ST 36, ST 34, ST 44, ST 21, Ren 12

To regulate the Stomach, stimulate ST 36, UB 20, UB 21, Ren 12, ST 21

If there is a presence of Cold, use moxa on the points listed above.

If there is a presence of Heat, add ST 44, LI 11

3) Cold invading the Stomach

Etiology:

This is an acute excess pattern and is similar to the pattern mentioned above. Energetically cold or raw foods or cold natured medications such as antibiotics may block the normal descent of Stomach Qi causing it to rebel, giving rise to symptoms of rebellion mentioned below.

Symptoms:

Nausea, lethargy, vomiting of clear liquids or frothy foam like fluids, belching, gurgling noises in the abdomen with possible associated symptoms of watery diarrhea. There may be an exaggerated need to seek warmth, shaking or shivering.

Session principle:

Warm the Cold and descend the Stomach Qi

Points to use:

To warm the cold, use moxa on Ren 9, Ren 13, ST 36, UB 20, UB 23, DU 4

To descend the Stomach Qi, stimulate ST 36, ST 34, ST 21, Ren 10, Ren 13

4) Food stagnation**Etiology:**

Similar to the previous acute excess patterns, food stagnation simply means that the Stomach Qi has been overwhelmed by large amounts of food from either overeating or eating too quickly. It results in vomiting undigested food and other symptoms listed below.

Symptoms:

Vomiting of undigested food and fluids, excess salivation

Session principle:

Resolve the stagnation, descend the Stomach Qi

Points to use:

To resolve the stagnation of food and descend Stomach Qi, stimulate Ren 10, SP 4, PE 6, ST

Deficiency Syndromes of the Stomach

1) Stomach Qi deficiency

Etiology:

Stomach Qi deficiency can arise for reasons that include the natural aging process, Spleen and Lung Qi deficiency which in turn fail to transport Zhen Qi to the Stomach, too much or too little exercise, both of which deplete the Spleen Qi, and improper or inconsistent nutrition, which includes improper diet or malnutrition, eating too quickly.

Symptoms:

Stomach Qi deficiency due to any of the factors mentioned above, will lead to the inability of the Stomach Qi to fulfill its usual functions. This may lead to one or a combination of symptoms including: bloating, belching, nausea, lack of appetite, distention, vomiting of clear or foamy white liquids, fatigue, malaise, a disinclination to exercise, a need for warmth, sleeping curled up.

Session principle:

Strengthen Stomach Qi

Points to use:

To strengthen the Stomach Qi, stimulate ST 36, UB 20, UB 21, Ren 12, Ren 6

2) Stomach Yin deficiency

Etiology:

Similar to the pattern above, Stomach Yin deficiency can arise for reasons that include the natural aging process, improper feeding and nutrition, including inconsistent nutrition, eating too quickly, improper diet or malnutrition, the chronic ingestion of energetically hot foods, exercising directly after eating.

Stomach Yin deficiency represents a deeper stage of depletion than Stomach Qi deficiency.

Symptoms:

Symptoms of Stomach Yin deficiency, for reasons mentioned above, may result in symptoms that include: burning pain in the abdomen, increased thirst, increased or lack of appetite (see above), dry mouth and mucus membranes, discomfort and groaning after eating, panting, avoidance of heat, constipation with small, dry pellet-like stools.

Session principle:

Nourish Stomach Yin

Points to use:

To nourish Stomach Yin, stimulate SP 6, KID 6, ST 36, Ren 4, Ren 12

Introduction to the Spleen

The Spleen known as **Pi**, along with the Lung, is one of the primary organs for creating Postnatal Qi in TCM.

It sits in the middle Jiao alongside the Stomach and according to some sources, the Liver, and is primarily responsible for digestive processes, as well as for the creation of Postnatal Qi and for the transformation and transportation of fluids.

It is paired with the Stomach system and both organs belong to the Earth element. Of these two organ systems within the Earth element, the Spleen is the Yin organ (the Zang) and the Stomach is the Yang organ (the Fu).

Both on a physical and emotional level, the Earth element represents the ability to give and receive nourishment. The emotion associated with the Earth element is obsession or worry. Dogs who exhibit obsessive behavior likely have an imbalance within this element. Conversely, animals that are inconsistently fed or malnourished, may exhibit excessive insecurity and worry, becoming obsessive, especially in the area of food.

The Spleen's Areas of Influence

As we have seen, each Zang and Fu has an “area of influence” which can include many obvious as well as some not so obvious aspects of physiological functioning and responsibilities.

The Spleen has 5 major areas of influence:

- 1) It rules transformation and transportation
- 2) It rules the muscles and the four limbs
- 3) It controls the Blood
- 4) It supports the organs and the ‘raising of Qi’
- 5) It opens into the mouth and manifests in the lips

1) It rules transformation and transportation (T&T)

Unlike in Western medicine, the Spleen has a huge influence on digestion and the production of Qi and Blood in TCM. Its most important function is to extract the essence from ingested foods and separate the digestate into pure and impure substances. The pure Qi from food and drink (Gu Qi) is then transported to the upper Jiao to the Lungs and to the Heart. In the Lungs it combines with clean air to form Zhong Qi and in the Heart it is used to form Blood. The impure Qi is sent down to the Large Intestine for further separation or excretion.

The Spleen is therefore crucial in the manufacturing and transportation of Qi and Blood. So, with these particular functions in mind, if the Qi of the Spleen is weak, resulting symptoms may include fatigue, lethargy, poor Lung function (see symptoms of Lung Qi deficiency), deficiency of Qi and Blood of any of the Zang and Fu, anemia and other blood disorders, irregular heart beat, coldness, a disinclination to exercise.

The Spleen is also responsible for the normal movement and transformation of body fluids, separating fluids from ingested food and liquids and transporting the pure parts to the Lung for distribution to the skin and sending the impure part to the Intestines for further separation or excretion. Therefore, with these functions in mind, if the Qi of the Spleen is weak, resulting symptoms may include dampness or phlegm in any of the Zang and Fu or in the tissues in the form of swelling or edema; diarrhea, bloating, flatulence and noises in the abdomen, lethargy.

2) It rules the muscles and the four limbs

Because the Spleen is responsible for proper absorption resulting in adequate Qi and Blood production, its area of influence includes supplying the tissues, including the muscles of the four limbs, with adequate nourishment in the form of Qi and Blood. Muscle weakness and/or lameness are seen as a failure of this particular function of the Spleen. Limbs that are firm, supple and ready for movement are a sign that this function of the Spleen is strong and healthy.

3) It controls the Blood

In addition to its role in Blood production, the Spleen is also responsible for keeping the Blood in its proper vessels and pathways. If the Spleen Qi is healthy and strong, the Blood will stay contained in the proper vessels, but if this aspect of the Spleen's area of influence is weak, it may result in symptoms including hemorrhages from any part of the body, easy bruising, bleeding gums, other abnormal bleeding disorders.

4) It supports the organs and the 'raising of Qi'

Each Zang and Fu has a direction, the correct and healthy way in which the Qi of that particular organ system flows. The direction of the Spleen Qi is ascending. The force of this movement raises the Qi of the body and, along with its ability to keep muscles nourished and strong, this function of the Spleen ensures that the organs remain in their proper place. A weakness in this aspect of the Spleen's functioning will result in symptoms of prolapse. Overbreeding animals puts a strain on both the Spleen and Kidney Qi in TCM. The Spleen in particular is burdened with having to constantly provide nourishment for growing fetuses. The Blood and Qi production aspect of the Spleen as well as its "raising" function are compromised in the case of excessive breeding practices.

5) It opens into the mouth and manifests in the lips

The connection between the Spleen and the mouth is reflected the function of chewing, which prepares food for the digestive process and in particular for proper absorption. The Spleen is also responsible for the sense of taste, which creates appropriate salivation as well as appetite. Deficiencies in this area of influence may result in poor appetite or the incomplete chewing of food. The Spleen brings Qi, Blood and fluids to the lips, mouth and to the mucus membranes. Heat in the Spleen may result in dry and inflamed lips and mouth and deficiency in the Spleen's ability to nourish the lips and mouth may result in them being pale and dry.

Spleen Syndromes

Diseases or syndromes of the Spleen system can be divided into excess and deficiency. Excess syndromes tend to be acute in nature while deficiency syndromes tend to be more chronic.

Excess syndromes of the Spleen system:

- 1) Cold Damp invading the Spleen
- 2) Damp Heat invading the Spleen

Deficiency syndromes of the Spleen system

- 1) Spleen Qi deficiency
- 2) Spleen Qi sinking
- 3) Spleen Yang deficiency

Excess Syndromes of the Spleen

1) Cold Damp invading the Spleen

Etiology:

This is an acute condition resulting from ingesting either too much cold or raw foods (or energetically cold foods) or liquids. The cold nature overwhelms the Spleen's functions of transforming and transporting fluids and digestate. The Spleen is said to "dislike dampness" (compared with the Stomach) meaning that the amount of fluid, especially cold fluids, can easily overwhelm the Yang (Fire) of the Spleen and it becomes sluggish in its function of spinning off the fluids. Imagine the Spleen to be a water wheel, it uses its Qi to spin the fluids and the digestate like a centrifugal force. If the Qi of the Spleen is weak, or there is too much fluid to distribute, the Spleen becomes sluggish. This may result in a stagnation of fluid, or dampness in the middle Jiao, which further blocks the absorption process and the appropriate transformation and transportation functions. It may also lead to a downpour of fluids in the form of diarrhea.

Symptoms:

Poor transformation and transportation of Gu Qi and fluids result in symptoms that may include: diarrhea or loose stools, loss of appetite, reduced thirst, belching, vomiting white

foamy or clear fluids, lethargy, noises in the abdomen, feeling cold and seeking warmth.

Session principle:

Resolve Dampness, warm Cold, support the Spleen

Points to use:

To resolve Dampness, stimulate SP 6, SP 9, ST 36, ST 40

To warm Cold, moxa UB 20, UB 22, UB 23, DU 4

To support the Spleen, stimulate ST 36, SP 6, UB 20

2) Damp Heat invading the Spleen

Etiology:

Similar to Damp Heat in the Large Intestine, this syndrome is due to ingesting food that is either toxic or energetically too rich for the animal's digestive system. The toxic nature of the food creates Heat in the Spleen which mixes with the dampness already present in the middle Jiao. As the Spleen Qi is overwhelmed, it cannot raise the fluids resulting in a downpour of diarrhea or loose stools with a foul smell. A chronically inappropriate diet may create toxic heat in the stools which may result in bleeding as well as mucus in the stool. The Heat, along with the Spleen Qi's poor functioning, causes the blood to escape from the vessels and leak into the gut. The Heat and the Dampness together may cause irritation and inflammation of the mucus membranes of the digestive system, as well as the rectum and anus, causing visible swelling and redness.

Symptoms:

For reasons highlighted above, ingesting toxic, rich or energetically hot foods may cause some or a combination of the following symptoms: acute or chronic foul smelling diarrhea with or without a presence of blood and/or mucus, possible accompanying vomiting or nausea, restlessness, increased thirst, visible irritation, swelling and inflammation of the anal tissue.

Session principle:

Resolve Dampness, clear Heat and support the Spleen

Points to use:

To resolve dampness, stimulate SP 6, SP 9, ST 36, ST 40

To clear Heat, stimulate LI 11, LI 4, SP 9, UB 40,

To support the Spleen, stimulate ST 36, SP 6, UB 20

Deficiency Syndromes of the Spleen

1) Spleen Qi deficiency

Etiology:

This is one of the most common syndromes we see in TCM, in both humans and animals it can be simply due to the natural aging process. However, nutritional value and consistent feeding is key to the health of the Spleen. Poor food quality, food that comes directly from the fridge and malnutrition can all deplete the Qi of the Spleen. Too much or too little exercise which, because of the Spleen's connection with the muscles, can interfere with the Spleen's function of bringing Qi and Blood to the four limbs. Over-breeding puts too much strain on the animal's Spleen and Kidney Qi to provide nourishment for the fetus. Although we tend not to focus too much on the emotions of animals, we have to recognize that too much worry or insecurity, especially around food, can also drain the Spleen Qi.

Symptoms:

Because of the Spleen's vast areas of influence, especially its main function of Qi and Blood production, symptoms related to Spleen Qi deficiency may reveal themselves in other systems in the body. We will highlight some of the most common symptoms here, but this list is by no means exhaustive. Diarrhea, muscle weakness or lameness, disinclination to exercise, anemia, anorexia, weight loss or weight gain, bloating, gas, poor appetite, phlegm in the Lungs leading to breathing problems, poor stamina, coldness and seeking warmth, poor immune function, palpitations, anxiety, depressed affect.

Session principle:

Strengthen Spleen Qi

Points to use:

To strengthen Spleen Qi, stimulate ST 36, SP 6, SP 3, UB 20, UB 23, Ren 4

2) Spleen Qi sinking

Etiology:

Similar to Spleen Qi deficiency, but the weakness only effects the one specific function of the Spleen, to raise and support the organs. The most common cause for Spleen Qi sinking in animals is excessive breeding.

Symptoms:

This syndrome is related to the specific function of the Spleen to raise the Qi of the body and keep the organs in place. Failure of the Spleen to fulfill this function due to deficiency, may result in prolapse of any of the organs.

Session principle:

Strengthen the Spleen to raise the Qi

Points to use:

To strengthen the Spleen, stimulate ST 36, SP 3, SP 6, UB 20, UB 23

To raise the Qi, stimulate DU 20

3) Spleen Yang deficiency

Etiology:

Spleen Yang deficiency is similar to Spleen Qi deficiency, except there are more symptoms of Cold, reflecting the fact that the Yang aspect of the Spleen has been damaged. All organs systems have both Yin and Yang aspects to them, and in some cases, there is a tendency for one aspect to be damaged or tipped out of balance more easily than the other. An example of this is Lung Yin deficiency, the Yin of the Lung is damaged easily by Heat, Dryness or exposure to External Pathogenic Factors. We never see a case of Lung Yang deficiency.

In contrast, both the Yin and the Yang of the Kidneys can be damaged equally, depending on someone's constitutional tendency.

In terms of the Spleen, it is said that the Spleen dislikes Cold and Dampness more than Heat and Dryness, meaning that the Spleen Yang is damaged easily by Cold and Damp. It is very rare that we ever see symptoms of Spleen Yin deficiency as there is so much dampness present in the middle Jiao. When the Yang of the Spleen is damaged, the Spleen loses its

fire, which is needed for its transformative functions. Think about it in terms of needing fire to cook, if we do not have fire to assist in the cooking process, everything remains cold and raw. If the Yang of the Spleen is damaged, it cannot transform food into usable Qi and Blood or transport fluids. One of the hallmark signs of Spleen Yang deficiency is a presence of undigested food in the stool, which is usually loose. Damage to the Yang of the Spleen can arise from eating too much cold or raw foods including raw fruits and vegetables, as well as things like ice cream or iced water. Water should be consumed at room temperature, not with ice, according to TCM, as the ice slows down the digestive process by damaging the Yang of the Spleen.

Symptoms:

Foods that damage the Yang of the Spleen may lead to the Spleen not being able to transform and transport Gu Qi and fluids, causing symptoms that include; diarrhea with undigested food in the stool, coldness, poor digestive functioning including belching, bloating, lack of appetite; reduced thirst, cold limbs, lethargy, a desire to keep warm and sleep. The animal will curl up and will seek the comfort of heat or a blanket. On listening, sounds of fluids may be heard in the abdomen.

Session principle:

Warm Spleen Yang to transform Dampness

Points to use:

To warm Spleen Yang, apply moxa to Ren 9, Ren 12, Ren 4, DU 14, UB 20, UB 22, UB 23

To transform Dampness, stimulate SP 6, SP 9, ST 40, UB 20, UB 22

Introduction to the Heart

Similar to Western medicine, the Heart's (known as **Xin**) main connection in TCM is with the Blood and blood circulation. Another of its primary functions is to 'house' the Shen, which can be also referred to as the Spirit, the mind or, consciousness would be a better term for this precious functioning. Due to its connection with blood circulation and consciousness, it is seen as the most important of the Zang organs and has been called 'the Supreme Ruler'. Without the Heart system, there would be no blood circulation, no blood vessels and there would be no stable conscious thought processes or personality.

It sits in the upper Jiao alongside the Lung and, whereas the Lung Qi is responsible for

dispersing Qi all over the body, the Heart does the same with the Blood. One of the Blood's functions is to nourish the flow of Qi to keep it lubricated and healthy as it reaches all the tissues of the body, so the Heart and Lung sit side by side and have an inseparable function of bringing nourishment to support all tissues of the body, including the Zang and the Fu. It is said that the Qi leads the blood (a Yang function) and that the Blood nourishes the flow of Qi (a Yin function) - another way in which Qi and Blood are inseparable. Without either one, there would be no life.

The Heart is paired with the Small Intestine (SI) system and both organs belong to the Fire element. Of these two organ systems within the Fire element, the Heart is the Yin organ (the Zang) and the SI is the Yang organ (the Fu).

On an emotional level, the Fire element represents communication skills and appropriate behavior in respect to relationships with other beings in the surrounding environment. The emotion associated with the Fire element is joy or excitement and the pathological aspect of these emotions is anxiety. Most of us want our animals to be happy and to display emotions appropriate to their relationships with us and with other animals, especially the ones who belong to the same circle. This will create a harmonious pack. A dog who gets overexcited and over-joyous can lead to chaos. A display of exaggerated joy very soon flips into anxious behavior. So, a chronically overly manic dog or cat, or one with extreme anxiety and restless behavior, may lead us to suspect an imbalance within the Fire element.

The Heart's Areas of Influence

As we have seen, each Zang and Fu has an “area of influence” which can include many obvious as well as some not so obvious aspects of physiological functioning and responsibilities.

The Heart has 4 major areas of influence:

- 1) It governs the Blood
- 2) It controls the blood vessels
- 3) It houses the Shen
- 4) It opens into the tongue

1) It governs the Blood

The Heart governs the Blood in two ways. Firstly, after the Spleen has brought Gu Qi from the digestive system to the Lung to form Zhong Qi, part of the Gu Qi is brought to the Heart to form Blood. It is here that this vital transformation occurs.

Secondly, just as the Lung circulates the Qi, so the Heart is responsible for blood circulation. The Heart Qi needs to be strong in order for the Heart to be able to bring Blood to every tissue of the body. Similarly, the Heart itself depends on a healthy supply of blood to keep it functioning normally.

If there is not enough Blood, this will lead to malnourishment of the Zang and the Fu, including the Heart, as well as symptoms that relate to mental and emotional health and efficient cognitive processing.

2) It controls the blood vessels

The health of Heart Qi and Blood is reflected in the integrity and strength of the blood vessels as well as the regularity of the pulse. Pulse qualities in TCM can reflect the health of all the Zang and Fu, but the robust quality of the pulse and the regularity of the beat reflect the health of the Heart Qi, Yin and Blood. Therefore, if the Heart Qi and Blood are weak, an irregular pulse in both quality and rhythm may result.

3) It houses the mind (the Shen)

As mentioned, the Heart is seen to house the Shen. Another way to describe this is that the Shen 'resides' in the Heart, specifically in the Heart Blood. The Shen has been described as many things in TCM, including the unique personality of the dog, its spirit as well as its ability to process information and problem solve in an appropriate way that is useful for survival. However, the concept of Shen is deeper than just personality and more substantial than mere ethereal spirit, it is the uniqueness in a being's existence. It is what you can see when you look into the dog's eyes. If there is not sufficient Qi, Blood and Yin in the Heart for the Shen to be rooted in it, then behavior including agitation, anxiety, mania, aggression, restless sleep, as well as an inability to respond to commands, may manifest.

4) It opens into the tongue

Panting is a way an animal releases heat. If there is no fever or if the surroundings are not hot, but a dog is panting, it is a sign either of pain or anxiety. Giovanni Maciocia describes that the tongue is the "offshoot" of the Heart in that the color and appearance of the tongue body

reflect the health of the Heart. In anxious dogs, the tongue may be redder and drier than in emotionally well-balanced ones. By allowing the tongue to hang out of the mouth, the anxious dog releases heat from the Heart. If there is sufficient Qi, Blood and Yin brought to the Heart, the tongue will be a healthy pale red color and will be moist. If there is a lack of Yin, or too much heat in the heart, the tongue will be bright red and dry.

Heart Syndromes

Syndromes of the Heart system can be divided into excess and deficiency. Excess syndromes tend to be acute in nature while deficiency syndromes tend to be more chronic.

Excess syndromes of the Heart system:

- 1) Heart Fire or Heart Fire blazing
- 2) Phlegm Fire harassing the Heart

Deficiency syndromes of the Heart system:

- 1) Heart Qi deficiency
- 2) Heart Yin deficiency
- 3) Heart Yang deficiency

Excess Syndromes of the Heart

1) Heart Fire or Heart Fire blazing

Etiology:

Heart Fire in dogs usually comes from either a situation that causes extreme anxiety like abuse or separation, or from a fever that did not resolve, resulting in Heat harassing the Heart and the Pericardium, the Heart Protector. It is an excess syndrome, but like most hot conditions, will soon lead to a deficiency of Yin in the organ, if it not resolved.

Symptoms:

The Fire in the Heart which arises as a result of one of the above causes, may lead to one or a combination of the following symptoms that include: anxiety, manic behavior, inability to relax, panting, obsessive pacing, separation anxiety that in extreme cases can lead to incontinence (the Heart Fire is transmitted to the SI, its interiorly/exteriorly related pair, which in turn invades the Urinary Bladder, related to the Small Intestine via the six divisions, causing leakage when the dog is scared.

Session principle:

Clear Heart Fire, protect the Yin

Points to use:

To clear Heart Fire, stimulate HT 3, HT 7, HT 8, PC 3, PC 7, PC 8, UB 15, UB 44

To protect the Yin, stimulate HT 6, KID 6, SP 6, UB 15, UB 23

2) Phlegm Fire harassing the Heart

Etiology:

This is not commonly seen in dogs, but could be either the result or the reason for seizures or a stroke in TCM.

In TCM a combination of Phlegm and Fire can block the openings (called the orifices or the portals) of the Heart causing seizures or a loss of consciousness in the animal. The origin of the Phlegm may come either from feeding an animal food that is too rich for its digestive system, so it impairs the Spleen's ability to transform the fluids, leading to a formation of sticky phlegm, or Spleen Qi deficiency that leads to the formation of Phlegm. Either way, systemic or pathological Heat combines with the Phlegm, causing the fluids to evaporate and resulting in more sticky Phlegm like substance that blocks the meridians. As the Phlegm accumulates, Heat can rise and bring it upwards to block the Heart's orifices causing a change in, or a lack of consciousness. If the Phlegm is not resolved, it may block the flow of Qi and Blood along any of the meridians, leading to paralysis.

Symptoms:

As a consequence of the factors above, a combination of Phlegm and Fire block the Heart's orifices, leading to symptoms which may include: confusion, seizures with or without loss of consciousness, the dog may let out a 'screaming' noise, loss of balance, manic behavior, tongue thrusting.

This is obviously a very serious syndrome and should be checked by a vet.

Session principle:

Resolve Phlegm, open the orifices, clear the Fire or Heat from the Heart

Points to use:

To resolve Phlegm, stimulate ST 40, PC 5, SP 9 SP 3, SP 6, UB 20

To open the orifices, stimulate DU 16, DU 20, DU 26

To clear Fire, stimulate KID 1, HT 8, HT 7, LI 11, ST 44

Deficiency Syndromes of the Heart**1) Heart Qi deficiency****Etiology:**

The Qi of the Heart depends on the Qi of the Spleen and Lung to be sufficient for proper functioning. This can be compromised simply by the aging process or poor quality of food. These are the main reasons for general Qi deficiency. Overworking a dog can also cause a deficiency in all Zang and Fu, especially in the Spleen because of its connection to the muscles, and in the Heart because of its function of Blood circulation. If the Heart is worked too hard, it will become deficient in Qi and/or Blood and both of these factors will eventually lead to Heart Yin deficiency.

Symptoms:

Irregular heartbeat is one of the main symptoms of Heart Qi deficiency, along with fatigue, a disinclination to walk or exercise and panting or shortness of breath during any periods of physical activity or strain

Session principle:

Tonify the Qi of the Heart

Points to use:

To tonify the Qi of the Heart, stimulate HT 7, Ren 17, ST 36, SP 6, UB 15

2) Heart Yin Deficiency

Etiology:

The Yin is seen as the 'Fluid of the Blood' and can become depleted as a result of Heart Blood or Heart Qi deficiency, or prolonged Heart Fire which burns up the Yin. As we have seen prolonged stress or anxiety can deplete all aspects of the Heart. This is a deficiency syndrome, so will develop over time.

Symptoms:

Anxiety, restless behavior, panting, increased thirst, dry tongue and mucus membranes of the mouth.

Session principle:

Nourish Heart Yin

Points to use:

To nourish the Yin of the Heart, stimulate HT 6, HT 7, SP 6, KID 6, UB 15

3) Heart Yang Deficiency

Etiology:

Just like with Spleen Yang deficiency, this syndrome reflects the fact that the Yang of the Heart, (often together with the Yang of the Kidney and Spleen) is taxed. As with the Spleen, when the Heart Yang is damaged, it loses its Fire. Heart Fire is supposed to descend down to the Kidneys to warm the Kidney Yang. Kidney Yin rises up to the Heart and cools Heart fire, thus completing a cycle of containment, warmth and nourishment between the two organs. Heart Yang deficiency in general presents together with Kidney Yang deficiency and this gives symptoms that we recognize as congestive heart failure. Often a congenital problem, but it can also arise from long term environmental exposure to Cold and Damp weather, congenital Kidney and Spleen Yang deficiency and a diet of too much raw foods or energetically cold foods, which as we have seen will tax the Yang of the Spleen, so the Spleen cannot support the Heart.

Symptoms:

Any combination of these factors mentioned above may cause Heart Yang deficiency and symptoms may include: shortness of breath especially on exertion, cough, palpitations,

listlessness, coldness, the dog will seek the comfort of heat or a blanket. Upon listening, sounds of fluids may be heard in the chest.

Session principle:

Warm the Heart Yang

Points to use:

To warm Heart Yang, apply moxa to Ren 14, Ren 12, Ren 4, DU 14, UB 15, UB 20, DU 4

Introduction to the Small Intestine

The Small Intestine's (known as **Xiao Chang**) primary responsibility is to receive the food sent down from the Stomach and Spleen as waste, and to further separate this into pure and impure. It also plays an important role in the transformation of fluids. It sits in the lower Jiao along with the Urinary Bladder and according to some sources, the Liver. It is paired with the Heart system and both belong to the Fire element. Of these two organ systems within the Fire element, the Small Intestine is the Yang organ (the Fu) and the Heart is the Yin organ (the Zang).

The emotional or mental aspect of the SI reflects the function of mental processing and of sorting through information to respond with correct behavior. When this function of the SI does not work properly, the dog will appear confused and will not be able to follow a command.

The Small Intestine's Areas of Influence

On a physical level, each Zang and Fu has an "area of influence" which can include many obvious as well as some not so obvious aspects of physiological functioning and responsibilities. The Zang organs have greater areas of influence than the Fu.

The Small Intestine has two main areas of influence:

1. Firstly, the SI receives the ingested food and liquid from the Stomach and separates it into

pure and impure parts. It then brings the pure part of digestate to the Spleen for dispersing to the rest of the body, and it descends the impure part to the Large Intestine to be excreted as waste.

2. The second function of the SI is in relationship to the Urinary Bladder. The food from the Stomach, as we have seen, is sent to the SI for separation. This also happens with the liquid part of food and drink. The dirty or impure part, after separation, is sent to the Bladder for excretion in the form of urine.

Small Intestine Syndromes

Diseases or syndromes of the Small Intestine system can be divided into excess and deficiency. Excess syndromes tend to be acute in nature while deficiency syndromes tend to be more chronic.

Excess syndromes of the Small Intestine system:

- 1) Small Intestine tied
- 2) Heat in the Small Intestine
- 3) Worms in the Small Intestine

Deficiency syndromes of the Small Intestine system:

- 1) Small Intestine is Cold and deficient

Excess Syndromes of the Small Intestine

1) Small Intestine tied

Etiology:

This is a sudden acute invasion directly to the Small Intestine by cold/raw food or liquids, or energetically cold natured foods. The cold blocks and damages the ability of the Small Intestine causing severe twisting pain and constipation. Exercising right after eating will also cause stagnation.

The blockage in the SI also causes the Stomach Qi to rebel because its function of descending is blocked, causing vomiting. In Western medicine, this could be seen as bloat or torsion and should always be taken seriously and be referred out, as the twisting of the

stomach and/or intestine could cause organ death.

Symptoms:

The cold contracts the SI in TCM, and can cause the following symptoms: painful cramping, sudden constipation and vomiting as well as extreme bloating and distention. The dog or cat will feel cold inside and will therefore seek warmth. Because this is an Excess syndrome, the animal will resist touch or pressure to the abdomen and will seek warmth. There will likely be a loss of appetite and lethargy.

Session principle:

Seek veterinary advice

Remove obstruction and regulate the Small Intestine

Points to use:

To remove obstruction and regulate the SI – ST 25, Ren 4, UB 25, UB 27, LIV 3, LI 4

2) Heat in the Small Intestine

Etiology:

This syndrome is due to ingesting food that is either toxic or energetically too hot or rich for the animal's digestive system. The toxic nature of the food creates Heat in the Stomach and Small Intestine causing constipation. This syndrome can also arise from Fire in the Heart invading the Small Intestine as the two organs are paired, therefore pathogens can easily transfer from one to another. If this is the case, there will have been a history of anxiety and restlessness.

Symptoms:

Abdominal pain and constipation with or without vomiting. This is a hot syndrome, so the dog will seek a cold and quiet place to lie and will sleep stretched out. There will be restlessness and abdominal bloating, scanty and dark urination as the heat burns up the fluids causing a more concentrated urine.

Session principle:

Clear Heat in the Small Intestine (and Heart or Stomach if appropriate)

Points to use:

To clear Heat from the Small Intestine, stimulate LI 11, ST 44, DU 14, Ren 4, SI 2

For Heat in the Heart and Stomach, stimulate LI 11, ST 44, HT 8, DU 14, UB 15, UB 44, UB 21

3) Worms in the Small Intestine

Etiology:

Worms in TCM are said to thrive in the cold conditions that mainly present in the Spleen and Intestines. Eating expired or toxic foods or feces may cause a worm infestation which blocks the function of the Small Intestine.

Symptoms:

Worms blocking the function of the Small Intestine may give rise to the following symptoms: abdominal pain and distention, cold limbs, intense hunger and wasting or malnourishment of the tissues of the body. The dog will also have foul breath. There may be an appearance of worms either in the stool or in the anus after defecation.

Session principle:

Acupressure is not applicable for this condition, please immediately refer to vet.

Deficiency Syndromes of the Small Intestine

1) Small Intestine is cold and deficient

Etiology:

This is seen as a cold deficiency syndrome, not unlike Spleen Yang deficiency. The cold generated by a lack of Yang Qi slows down and blocks the Small Intestine function of receiving and transforming fluids, giving rise to diarrhea with undigested food, abdominal pain and bloating that is relieved by warmth, therefore the dog will seek to soothe itself by finding a warm place to lie.

Symptoms:

Abdominal pain, diarrhea, desire for warmth, desire for pressure on the abdomen as this is a

deficiency condition, borborymus (gurgling sounds in the abdomen).

Session principle:

Warm and strengthen the Yang of the Small Intestine and the Spleen

Expel cold

Points to use:

To warm and strengthen the Small Intestine and Spleen, stimulate or apply moxa to Ren 4, LIV 13, ST 36, UB 20, UB 27

To expel the Cold apply moxa to DU 14, ST 36, LI 4

Introduction to the Urinary Bladder

As in Western medicine, the primary function of the Urinary Bladder (known as **Pang Guang**) is the storage and excretion of fluids in the form of proper retention and urination. This function occurs under the direction of the Kidney Yang, so if the Kidney Yang is deficient, the correct functioning of the UB will be impaired.

The Urinary Bladder sits in the lower Jiao along with the Kidney and, according to some sources, the Liver, and it is paired with the Kidney system. Both belong to the Water element. Of these two organ systems within the Water element, the UB is the Yang organ (the Fu) and the Kidney is the Yin organ (the Zang). The connection between the Kidney system and the UB is functionally very close. As we have seen, the Kidney receives impure fluids from the Lung and passes them to the UB for storage and ultimately, excretion. The UB receives impure or dirty fluids from the SI and the LI and again, it retains and excretes under the direction of Kidney Yang. A malfunction in either aspect of the Kidney system, the Yin or the Yang, may disrupt the UB's function of urinary retention, causing incontinence.

The emotion that affects the Water element is fear. Prolonged fear or sudden fright will drain the Kidney Qi and Yang, and subsequently will negatively affect the UB's function of storing and retaining urine, leading to chronic or acute urinary incontinence in a dog.

The Urinary Bladder's Areas of Influence

As we have seen, each Zang and Fu has an "area of influence" which can include many obvious as well as some not so obvious aspects of physiological functioning and

responsibilities.

The UB has one area of influence:

1) It transforms and excretes fluid from the body

As we have seen the UB receives impure fluids from the Kidneys and the SI and LI, which it stores and transforms into urine. The transformation of impure liquid to urine demands Heat and Qi, for both of which, the UB relies on the Kidney Yang. The UB also relies on the San Jiao to keep the water passages in the lower Jiao clear and free of obstruction. If the function of the San Jiao fails to keep the waterways free flowing, it may result in an accumulation of dampness in the lower Jiao, blocking the proper Bladder function and leading to urinary retention. Longstanding dampness may easily transform into damp heat in the lower Jiao, which may lead into a Bladder infection, a Kidney infection, or worse, bladder stones.

Urinary Bladder Syndromes

Diseases of the Urinary Bladder system can be divided into excess and deficiency syndromes. Excess syndromes tend to be acute in nature while deficiency syndromes tend to be more chronic.

Excess syndromes of the UB system:

- 1) Cold Damp obstructing the UB
- 2) Damp Heat obstructing the UB

Deficiency syndromes of the UB system

- 1) Bladder Qi deficiency

Excess Syndromes of the Urinary Bladder

1) Cold Damp obstructing the UB

Etiology:

This pattern is found when an animal has had too much exposure to external Cold and Damp

- for example, sleeping in a cold damp environment. It can also arise in smaller breeds, especially with short legs. When squatting to urinate, Cold Damp or bacteria can invade the urethra directly from contact with the ground, causing a blockage in the transformation process of the UB.

Symptoms:

Frequent and urgent but obstructed urination - the animal circles for a long time in anticipation of urination, but urinates only a tiny amount; lower abdominal pain, urine sample may or may not contain bacteria, but may be cloudy.

Session principle:

Resolve Dampness, warm the Cold, promote the proper function of the UB

Points to use:

To resolve Dampness, stimulate SP 9, SP 6, Ren 3, UB 22, UB 28

To warm the Cold, apply moxa to UB 22, UB 28, SI 3, Ren 3, SP 3

To promote the proper function of the UB, stimulate Ren 3, UB 22, UB 28, DU 4

2) Damp Heat obstructing the UB

Etiology:

Prolonged exposure to either a Damp Heat environment, or recurrent invasions of Cold Damp, which over time can lead to obstruction of the water passages. The Cold Damp obstruction can easily turn into Damp Heat. The Heat burns up the fluids of the urine, resulting in scanty, dark, burning urination.

Symptoms:

Dark, concentrated urine, possibly with blood or sand/crystals. The process of urination will burn, so the dog may be reluctant to urinate, causing further obstruction. There will also likely be thirst, fever, restlessness, anxiety around urination.

Any of these symptoms should alert the owner to have the urine analyzed as these can be symptoms of a Bladder or Kidney infection.

Session principle:

Resolve Dampness, clear Heat, open the water passages

Points to use:

To resolve Dampness, stimulate SP 9, SP 6, Ren 3, UB 22

To clear Heat, stimulate LI 11, UB 67, SJ 5

To open the water passages, stimulate UB 28, ST 28

Deficiency Syndromes of the Urinary Bladder

1) Bladder Qi deficiency

Etiology:

This pattern is interchangeable with Kidney Yang deficiency. It is the Yang of the Kidneys that supports the UB in its function of retaining as well as transforming the fluids. Weakness in this area will lead to the UB not being able to control the fluids, leading to a frequent and uncontrolled downpour of profuse, clear urine. This can be a result of the natural aging process, a congenital weakness, or a gradual weakening of Kidney Qi by over-breeding.

Symptoms:

Urinary incontinence with profuse, clear watery urination.

Session principle:

Warm and strengthen the Bladder, tonify Kidney Yang.

Points to use:

To warm and strengthen the UB, apply moxa to UB 23, UB 28, DU 4, Ren 3

To tonify Kidney Yang, apply moxa to UB 23, DU 4, DU 14, DU 20

Introduction to the Kidney

The Kidney (known as **Shen**), along with the Spleen and Lung, is one of the primary organs responsible for water metabolism in TCM. It sits in the lower Jiao alongside the Urinary

Bladder and the Intestines (both LI and SI) and, according to some sources, the Liver.

It is primarily responsible for the transformation of fluids. It also stores the Jing or Essence which has the following characteristics and functions:

- Jing is the basis of Yin and Yang for every Zang and Fu organ
- Jing coordinates reproductive function
- Jing is the basis for the creation of Postnatal Qi by supporting the Spleen and Lung functions
- Jing fuels the Urinary Bladder's function of excreting of fluids in the form of urine

The Kidney is paired with the Urinary Bladder system and both organs belong to the Water element. Of these two organ systems within the Water element, the Kidney is the Yin organ (the Zang) and the Urinary Bladder is the Yang organ (the Fu).

Fear is the emotion that is associated with the Kidney system. Shock is said to quickly drain the Kidney Qi and the Kidney Essence, and prolonged fear deeply depletes the Kidney Qi. The Kidney's spiritual aspect is the 'Zhi', which, translated, means willpower, or survival instinct. This deeply rooted drive to survive can exaggerate the fear of extinction, so the two emotional spaces, will to survive and fear, are interchangeable and interrelated.

Before we get into the areas of influence, it is necessary to talk generally about aspects of the Kidney system that play into all of its specific functions and pathologies.

There is so much to say about this system because the Kidney is seen to be the foundation of all physiological processes in TCM and influences each aspect of every one of the Zang and the Fu organs. Its functions, as well as its pathologies, are many and widespread. For this reason the Kidney is referred to as 'the root of life,' or, more specifically, 'the root of Prenatal Qi' - also referred to as the Jing.

The Jing and its functions

The Prenatal Qi is also referred to as the Jing, and is the equivalent of an animal's conformation or 'genetic potential'. Jing is stored in the Kidneys and, as we have said, is seen as the root of all physiological functioning in the body. In particular, it provides fuel to the Lung and to the Spleen to create Postnatal Qi, so if a dog's Prenatal Qi, or Jing, is weak, it will follow that its potential for creating an adequate supply of Postnatal Qi will be constantly compromised.

It is useful to see Kidney Jing as the inherited Qi of the body. The pool of Jing is limited to the amount and quality (including both health and strength) that is inherited from the sire and the

bitch at conception. As this quality of energy varies from day to day, the Jing of a dog is totally unique. If a bitch has been subjected to over-breeding, for example, or breeds when she is older, her Jing will have been weakened thus having less genetic potential to pass on to the offspring.

With proper management, which in the case of dogs as with people includes good nutrition, regular exercise, appropriate breeding practices, and emotional stability, a dog with good strong Jing will live a long and healthy life.

Going back to our analogy of seeing the Jing, or Prenatal Qi, as an inheritance, the Jing then, is a fixed amount that can be depleted, but cannot be added to. On a positive note, it can be positively influenced and maintained by diet and proper exercise as stated above.

This inherited material is all that the dog has for its lifetime. It can be divided into:

1) The **Kidney Essence**, in simple terms, can be seen as the equivalent of a 'savings account' of energy (as opposed to the Postnatal Qi, which could be seen in this analogy, as the checking account). The Kidney Essence is a deeper form of Qi that supports all other forms of Qi, and in particular, the Blood. It is seen as an aspect of the Jing that is more fluid. It is not as deep as the Jing and it is a combination of Prenatal and the Postnatal Qi. It can be replenished by Postnatal Qi as long as the Spleen, the Stomach and Lungs are working correctly. As it is part of the Jing, it is stored in the Kidneys but the Essence circulates via the 8 extraordinary meridians which bring it to the regular channels to supplement the Qi and Blood flowing there. Being deeper than the Postnatal Qi, it can be drawn upon during times of trauma, illness, or on any occasion where the dog is under a great deal of stress, to help to replenish the body. An example of this would be in the case of a bitch after giving birth. Sometimes there simply is a negative balance, where more Qi has been given out than has been received in the form of food, fresh air and appropriate exercise. At times like this, the deeper Essence is called upon to supplement the Qi of the body.

The Essence is responsible for tissue repair as well as reproductive functioning, the bitch's Kidney Essence and Blood nourishes the embryo & fetus during pregnancy. It follows, then, that if her Essence is weak or compromised for any reason, these functions will not be fulfilled efficiently and the puppies will have weak conformation. Also, if a dog is forced to breed too often, or is subjected to repeated injuries, or chronically exposed to inappropriate stress or temperatures, its Kidney Essence (remember, the savings account) will be prematurely depleted, and all bodily functions will become compromised.

2) The **Kidney Qi** would be the equivalent of a checking account of Qi. The Kidney Qi supports all the organs of the body in maintaining their correct functions. It gets depleted by the end of the day, but if there is good nutrition, plenty of rest and an appropriately healthy,

stress-free environment, as well as a sufficient amount of new Qi being created by the Spleen and Lung, the Kidney Qi will be replenished and the savings account (the Kidney Essence) will remain untouched. Poor nutrition, prolonged fear, stress or anxiety, over-breeding, periods where a dog is worked too hard, or has been exercised too little, can cause the Kidney Qi to be drained and this puts a stress on the Kidney Essence and the limited 'savings account' of Qi. In this case, a disease cycle will begin, which we will discuss later.

As with everything in TCM, there are two aspects to the Jing, a Yin and a Yang aspect. The Jing is, in fact, the foundation of Yin and Yang in the whole body.

It is unusual that a Zang or a Fu is equally balanced in terms of Yin and Yang. Usually one aspect is stronger than another in fulfilling the functions within that organ's area of influence, and, when a Zang or Fu is in a state of imbalance, it is usually one aspect over the other that becomes compromised. An example of this is the function of the Spleen Yang to transport and transform the fluids, or the function of the Lung Yin to lubricate and cool the Lung system and skin. We never hear of Lung Yang deficiency, or rarely, Spleen Yin deficiency.

In contrast to this, the Kidney system is balanced equally in terms of the functions and pathologies of Yin and Yang. The Yang supports all Zang and Fu's processes of transformation. In particular, it supports the Yang of the Spleen, Urinary Bladder, Liver and the Heart. The Kidney Yin is the foundation of nourishment and lubrication in the body. In particular it supports the Yin of the Lung, Stomach, Liver and Heart and forms the fluid of the blood.

Another aspect of Kidney Jing is that it presents in the form of the body's marrow. In TCM the marrow is a fluid like part of the Jing that nourishes the bones and the joints to keep them strong and supple. It is also said to fill the spinal chord and the brain and is responsible for coordinated movement, along with the Liver, and for proper neurological functioning and processing. A decline of the marrow, along with the Kidney Qi, as a result of the normal aging process or too much physical or emotional stress may result in the following symptoms: stiffness and lack of mobility in the joints and the spine, recurrent traumatic injury to bone and soft tissue which takes longer to heal, teeth become weak and break easily, compromised neurological functioning including behavioral changes.

The Kidney's Areas of Influence

As we have seen, each Zang and Fu has an "area of influence" which can include many obvious as well as some not so obvious aspects of physiological functioning and

responsibilities.

The Kidney has 5 major areas of influence:

- 1) It stores the Jing which rules the bones and the processes of birth, growth, development and reproduction
- 2) It is seen as the foundation of Yin and Yang
- 3) It regulates water metabolism
- 4) It 'receives' the Qi from the Lungs
- 5) It opens into the ears and manifests in the hair

1) It stores the Jing which rules the bones and the processes of birth, growth, development and reproduction

As we have seen, the processes of growth, development, reproduction and the conformation/constitution of a dog is under the influence of the Jing. The health of the Jing determines the strength, performance, endurance, recovery time, temperament and longevity of the dog as well as its ability to breed and to produce healthy offspring.

2) It is seen as the foundation of Yin and Yang

The Kidney Qi (and in particular the health of the Jing) is seen as the foundation for every single substance and process in the body. There are two aspects to the Kidney Qi, the Kidney Yang and the Kidney Yin (Fire and Water). The Kidney Yin and the Yin aspect of the Jing are the foundational sources of Yin in the entire body. They are the basis for Blood and fluids, sperm, marrow and bone. They provide moisture and nourishment for all the tissues and organs of the body and they promote an even temperament and provide the ability to rest and restore. All physical structures and organs have their root in the health of the Kidney Yin.

The Kidney Yang and the Yang aspect of the Jing are the basis for all of the physiological and transformational functions of all of the organs in the body, including reproductive functioning. They provide activity, movement and the heat necessary for digestive functioning and for the transformation and excretion of waste and fluids.

3) It regulates water metabolism

Along with the Lungs and the Spleen, the Kidneys are instrumental in water metabolism and

the purification process in the body in the following ways:

The Kidneys live in the lower burner with the Urinary Bladder and the Intestines, both Small and Large. The Small and Large Intestine's role is to separate the pure from the turbid fluids in the body. This process is under the influence and the transformational power of the Kidney Yang.

The Kidney receives Qi and fluids from the Lungs, which live in the upper burner. Part of this is separated then sent back up to the Lung to be used to moisten the Lungs and the skin. The rest of the fluids are sent to the Urinary Bladder for excretion. All these processes are carried out under the motive force of the Kidney Yang.

The Kidneys send impure water to the Urinary Bladder and provide the Bladder with the Yang and the Qi to store and excrete the water as urine. This process cannot happen without the motive force of the Kidney Yang.

One of the main functions of the Spleen Qi is to transform and transport body fluids. Without the support of the warming force of the Kidney Yang, this process would not happen and edema (an accumulation of pathological body fluids) would collect in the body and obstruct the flow of Qi and body fluids.

4) It 'receives' the Qi from the Lungs

As mentioned previously, the Kidney Qi has a functional relationship with the Lungs, which lie in the upper Jiao, and together these two organs are responsible for both moistening (through their connection with the waterways - the Lung in the upper Jiao and the Kidneys in the lower Jiao) and detoxifying the body (through the processes of sweating and urination).

There is another relationship in the simple function of breathing. As the Lungs breathe, they bring in clean air and fluid from the environment and descend it to the Kidneys in the form of Qi. The Kidneys are responsible for 'grasping' and anchoring the Qi and fluid from the Lungs. During this process, the Kidneys absorb some of the fluids and send them back to the Lungs in the form of vapor to moisten and lubricate the Lungs.

If the Kidney Qi is deficient, it will fail to anchor the Lung Qi and the Lung Qi will 'float' causing an obstruction in the Lungs, resulting in a cough, breathlessness and possibly wheezing or asthma. If the Lung Qi is deficient, it will fail to descend the Qi to the Kidneys, causing shallow breathing or panting, possibly with the sound of fluid accumulation in the Lungs.

In order for the functional relationship between the Lungs and the Kidneys to remain balanced and therefore ensure the proper moistening of the Lung tissue, the proper excretion of fluids and for unobstructed and easy respiration, both the Lung Qi and the Kidney Qi must be sufficient.

5) It opens into the ears and manifests in the coat

The ears are the opening of the Kidneys and in order for proper hearing to occur, there must be sufficient Kidney Essence to nourish the ears. This is why when we as humans and animals age, our hearing gradually declines along with our Kidney Essence.

The health of a dog's coat is a sign of the health of the Kidney Essence as it is dependent on the nourishment of the Essence to give it thickness and luster. Illness or stress including fear, especially if it is chronic, will, as we have seen, deplete the Kidney Essence and will affect the appearance of a dog's coat, particularly its luster and texture. Obviously, dietary considerations as well as the health of the Spleen and Lung play a huge factor in the health of the coat, but according to TCM, it is the health of the Kidney Essence that is reflected in the luster and texture of a dog's coat.

Kidney Syndromes

Diseases or syndromes of the Kidney system can only be of a deficient nature. Deficiency syndromes tend to be more chronic.

Deficiency syndromes of the Kidney system

1. Kidney Qi deficiency (includes Kidney Qi not form)
2. Kidney Yin deficiency
3. Kidney Yang deficiency
4. Kidney Jing deficiency

Excess Syndromes of the Kidney

Diseases or syndromes of the Kidney system can only be of a deficient nature.

Deficiency Syndromes of the Kidney

1) Kidney Qi deficiency (includes Kidney Qi not form)

Etiology:

As we have seen, the Kidneys are the foundation of all processes and systems in the body. We can see the Kidney system as a back-up, a storage facility for Qi, Blood and Body Fluids. It follows, therefore, that any systems in the body that are subject to long term imbalance or disease may subsequently draw too much Qi from the Kidneys, leading to a deficiency of Kidney Qi. In particular, the Spleen and Lung are very dependent on the Kidney Qi to help with fluid transformation as well as Qi and Blood production. If the Spleen or Lung Qi become deficient due to chronically poor or inappropriate diet, malnutrition or long term illness, this can eventually deplete the Kidney Qi.

Other factors that specifically deplete Kidney Qi in dogs include: the natural aging process, hereditary weakness, prolonged fear, stress or separation anxiety, blood loss, chronic illness including allergies, over-breeding, too much or too little exercise.

Symptoms:

Kidney Qi deficiency, which arises as a result of one or a combination of the above causes, may lead to one or a combination of the following symptoms: urinary (in extreme cases fecal) incontinence, lethargic behavior, weak lower back, anxiety, fear aggression.

Session principle:

Strengthen the Spleen Qi to support the Kidney

Points to use:

To strengthen Spleen Qi, stimulate ST 36, UB 20, SP 3, SP 6

To tonify Kidney Qi, stimulate KID 3, DU 4, UB 22, UB 23

2) Kidney Yin deficiency

Etiology:

As we have seen, the Kidney Yin is the foundation for all the Yin of the body, it follows, therefore, that if the Yin aspect of any of the Zang or Fu organs becomes depleted, it will eventually drain the Yin of the Kidneys. The Kidney Yin has a particularly close relationship with the Yin of the Liver and the Heart, so damage to the Liver or Heart Yin may eventually cause Kidney Yin deficiency. The Liver and the Heart are particularly associated with

emotional disorders, dogs with long term aggressive behavior will likely be vulnerable to Liver Yin deficiency and dogs that have long term anxiety or have been chronically subjected to too much stimulation will likely be vulnerable to Heart Yin deficiency. Both of these conditions may eventually lead to Kidney Yin deficiency.

Other factors that specifically deplete Kidney Yin in animals include: the natural aging process, hereditary weakness, prolonged fear, stress or separation anxiety, blood loss, chronic illness including allergies, over-breeding, too much or too little exercise, long-term exposure to environmental heat or dryness, dehydration, malnutrition.

Symptoms:

Kidney Yin deficiency, which arises as a result of a combination of the above causes, may lead to one or a combination of the following symptoms: urinary frequency with small amounts of urine, incontinence, possibly recurrent UTI's, agitated and restless behavior, panting, dry tongue, dry skin and coat, dandruff, dry and dull eyes, weak lower back, fear aggression, animal feels hot to touch, sleeps outstretched and seeks cool places.

Session principle:

Clear Heat if needed

Nourish Kidney Yin

Points to use:

To clear Heat, stimulate LI 11, ST 44, DU 14, HT 7, LIV 2

To nourish Kidney Yin, stimulate SP 6, KID 6, LU 7, UB 23, HT 6

3) Kidney Yang deficiency

Etiology:

As we have seen, the Kidney Yang is the foundation for all the Yang of the body. It follows, therefore, that if the Yang aspect of any of the Zang or Fu organs becomes depleted, it will eventually drain the Yang of the Kidneys. The Kidney Yang has a particularly close relationship with the Yang of the Spleen, so damage to the Spleen Yang may eventually cause Kidney Yang deficiency. One of the major factors influencing the decline of Yang energy in the body is Cold, both interior and exterior. Cold damages the Yang Qi and slows down its transformative potential, leading to slow metabolic processes and sluggish circulation of Qi, Blood and Body Fluids. One of the main avoidable factors that can damage the Yang of the Spleen is too much raw, cold or food with cold energetic properties. This literally kills the fire of the digestive process, leading to a downpour of runny diarrhea full of

undigested food. Over the long term, this can damage the Yang of the Kidneys, especially in older dogs, whose digestive processes are already compromised.

Other factors that specifically deplete Kidney Yang in dogs include: the natural aging process, hereditary weakness, prolonged fear, stress or separation anxiety, chronic illness including food allergies, over-breeding, too much or too little exercise, long-term exposure to environmental cold or dampness, malnutrition.

Symptoms:

Kidney Yang deficiency, which arises as a result of a combination of the above causes, may lead to one or a combination of the following symptoms: urinary frequency with large amounts of urine, urinary (sometimes fecal) incontinence, lethargic and fearful behavior, cowering, trembling, compromised immunity, excessive saliva, cold wet nose, disinclination to activity, sleeping curled up, diarrhea with undigested foods, poor appetite, weak lower back, fear aggression, animal feels cold to the touch and seeks warmth.

Points to use:

To warm the Spleen and Kidney Yang, apply moxa to and stimulate LI 10, ST 36, Ren 12, DU 4, SI 3, UB 62, KID 7, UB 23, UB 22, UB 20

4) Kidney Jing deficiency

Etiology:

The Kidney Jing, as we have seen, is a dog's conformation, its constitutional strengths and tendencies and genetic potential. It is responsible for the proper and appropriate development of the frame and structure of the body, including the spine, the bones and teeth, the joints, correct neurological functioning, temperament, health of the reproductive system and the survival of the genetic line.

The only etiological factors that influence the strength of the Jing of a dog include any hereditary weaknesses in the health of or as a result of the age of the sire and the bitch.

Symptoms:

Kidney Jing deficiency, which arises as a result of the above causes, may lead to one or a combination of the following symptoms: poor conformation, chronic allergies, neurological deficits like Wobbler's disease, poor oral health, dwarfism, soft tissue weakness, cancers, heart abnormalities, malformation of the brain and spinal chord, cleft palate, collapsed trachea, alopecia, seizures, blood disorders, gastric torsion, generalized myopathy, hanging tongue, hypoplasia of the trachea, hernias, blindness or deafness, osteochondrosis.

Session Principle:

As the Jing of a dog cannot be tonified, only preserved, the principle is to support the Postnatal Qi by tonifying the Lung and Spleen Qi and keeping the Qi and Blood circulating to prevent pain, by opening the affected meridians implicated in the presenting symptoms.

Points to use:

To support the Kidney via the Spleen and Lung Qi, stimulate LI 10, ST 36, Ren 17, LU 1, LU 9, Ren 12, UB 13, UB 20, UB 23

To circulate Qi and Blood, stimulate LIV 3, LI 4, UB 17

Stimulate Shu Stream points and Xi Cleft points (see Point Classifications section of Chapter 4) on appropriate meridians

Introduction to the Pericardium

The Pericardium (known as **Xin Bao**) sits in the upper Jiao alongside the Heart, and is primarily responsible for the function of protecting the Heart from External Pathogens. It is seen as the outer layer of the Heart, absorbing and deflecting fevers and keeping negative emotional states away from the Heart. It has a particularly close relationship with the emotional state of a dog. Because it is so closely related to the Heart, the Pericardium shares the Heart's relationship with the Shen, in particular, it helps influence clear thinking as well as correct and appropriate behavior and trust. It is paired with the San Jiao system and, along with the Heart and Small Intestine, these organs belong to the Fire element. Of these four organ systems within the Fire element, the Pericardium and the Heart are the Yin organs (the Zang) and the San Jiao and the Small Intestine are the Yang organs (the Fu).

The Fire element is all about appropriate communication, behavior and the formation of relationships. Most of the points on the Pericardium channel influence the emotional state and address emotional and behavioral disorders.

As we have seen in our study of the previous Zang and Fu organs, one of the fundamental differences between Chinese medicine and Western medicine is the acknowledgment that emotional and physical health are not just interrelated, but are inseparable. Each organ system has an area of influence that includes not only responsibilities for certain physiological functions but also an affiliation for a particular emotion. A tendency to a prolonged emotional

state will affect and may damage the physiological functioning of the organ to which the emotion is attached, just as a weakening or stagnation of the Qi of a particular organ will have an effect on the emotional state with which it is associated.

The emotion associated with the Fire element is joy and its pathological side is anxiety. The role of the Pericardium in particular is to infuse the being with joy and happiness and to guard the Heart against dangerous negative emotions. Excitement and joy is a normal and appropriate emotional response for a dog when its owner, for example, comes home. Appropriate expression of excitement or joy will cause no harm to the body and its functioning. In fact, a healthy release of joy infuses both the dog and the owner with happiness and encourages healthy attachment. Recurring or prolonged periods of uncontained joy and excitement, however, may cause an imbalance in the Fire element which may lead to the negative flip side of excitement which is anxiety. Prolonged anxiety, unchecked by the Pericardium, may be powerful enough to effect and damage the healthy physiological functioning of the Heart. We have all seen situations where a dog can get itself excited into more and more of a frenzy and stops listening to the owner. When the dog's "happy" behavior gets out of control and manic in this way, we are witnessing a flip between the positive emotion of joy and the negative and damaging emotion of anxiety. Trust has also been assigned to the Pericardium.

The Pericardium's Areas of Influence

On a physical level, each Zang and Fu has an "area of influence" which can include many obvious as well as some not so obvious aspects of physiological functioning and responsibilities.

The Pericardium has 2 major areas of influence:

- 1) It protects the Heart
- 2) It houses the mind or Shen

1) It protects the Heart

As in Western medicine, the Pericardium is seen in TCM as the Protector of the Heart. This is seen mainly in the context of an invasion of pathological heat, which, if it penetrates to the Heart, can be fatal. The symptoms associated with this type of invasion are extreme and include very high temperature, seizures, severe panting, erratic and/or aggressive behavior,

foaming at the mouth, loss of consciousness. Obviously, we, as animal acupressure practitioners, will not be treating disorders as serious as this and any of these symptoms being displayed should immediately be referred to a vet.

2) It houses the mind or Shen

As we have seen, the Pericardium is closely related to the Heart and the Heart's functions, so much so, that some sources say that the Pericardium shares all the major functions of the Heart. For our purposes, we will just highlight the relationship between the Pericardium and the Shen. In its role as protector of the Heart and as a member of the Fire element, the Pericardium plays a supportive role in ensuring the health of the Shen, which in turn affects cognitive processing and influences correct and appropriate behavior.

Pericardium Syndromes

Diseases or syndromes of the Pericardium system can only be of an excess nature. Excess syndromes tend to be acute.

Excess syndromes of the Pericardium system:

- 1) Heat invading the Pericardium
- 2) Phlegm Heat obstructing the Pericardium

Excess Syndromes of the Pericardium

1) Heat invading the Pericardium

Etiology:

An invasion of Heat to the Pericardium may arise if the Wei Qi of the dog is either temporarily deficient, or if the external Heat is particularly strong - strong enough to overpower the dog's immune system. This may occur if a dog is exposed to severe Heat, for example, if it is left out in the sun on a hot day, or tied up and is exposed to sunlight for most of the day. This syndrome can also occur with poisoning by toxic food or medications.

The Heat invades the body and is transmitted to the deepest level of the interior as the Wei Qi becomes overpowered. The Heat blocks the Pericardium, which, via its connection with

the Heart, has access to the “portals of the heart” or the consciousness.

Symptoms:

Heat invading the Pericardium, which arises as a result of one or a combination of the above causes, may lead to one or a combination of the following symptoms: restlessness, manic or aggressive behavior, loss of consciousness, seizures, panting, dehydration, nosebleeds, red dry tongue, nose and mucus membranes, rapid surging pulse.

Session principle:

As this is an emergency situation, a vet should be called immediately.

In the meantime, points can be stimulated to clear Heat from the Pericardium and to revive consciousness.

Points to use:

To clear Heat from the Pericardium, stimulate PC 3, PC 7, PC 8, PC 9, LI 11, ST 44, DU 20

To revive consciousness, stimulate DU 26, PC 9, HT 9, KID 1

2) Phlegm Heat obstructing the Pericardium

Etiology:

The etiology can be the same as for Heat invading the Pericardium, including an external invasion of extreme Heat or poisoning, but the presence of internal Phlegm combines with the Heat, leading to more disorientation, a greater likelihood of seizures or stroke and/or a loss of consciousness as the Heat rises and brings the Phlegm to block the portals of the Heart, as we saw with Phlegm Heat invading the Heart.

Symptoms:

Phlegm Heat obstructing the Pericardium, which arises as a result of one or a combination of the above causes, may lead to one or a combination of the following symptoms: disorientation, loss of balance, restlessness, manic or aggressive behavior, loss of consciousness, seizures, foaming at the mouth, panting, dehydration, nosebleeds, red tongue with a sticky yellow coat, rapid surging pulse.

Session principle:

As this is an emergency situation, a vet should be called immediately.

In the meantime, points can be stimulated to clear Phlegm and Heat from the Pericardium and to revive consciousness.

Points to use:

To clear Phlegm and Heat from the Pericardium, stimulate DU 16, DU 19, DU 20, DU 23, PC 8, PC 9, ST 40, SP 9, LIV 2, LI 11, ST 44

To revive consciousness, stimulate DU 26, PC 9, HT 9, KID 1

Deficiency Syndromes of the Pericardium

Diseases or syndromes of the Pericardium system can only be of an excess nature.

Introduction to the San Jiao

The San Jiao, also known as the Triple Heater, or Triple Burner, is a strange system in TCM. Although it has its own channel and acupuncture points, the San Jiao is more of a functional concept than an actual structure, meaning that there is no actual physical San Jiao organ.

There is no real equivalent in Western medicine, although some sources have compared it to the endocrine system or the lymph system. This is because the main functions of this curious system include water metabolism and temperature regulation between all areas of the body.

For the purposes of this class, we will just highlight the most common functions and disorders of the San Jiao system as it pertains to dogs.

It is paired with the Pericardium system and, along with the Heart and the Small Intestine, belongs to the Fire element. Of these four systems within the Fire element, the Heart and the Pericardium are the Yin organs (the Zang) and the San Jiao and the Small intestine are the Yang organs (the Fu). Unlike the other Zang and Fu, whose channels end in a physical organ, the San Jiao does not have a particular placement in the body, rather, it is seen as the communication between all areas of the body. The core concept of the San Jiao involves the division of the body into 3 main areas, the 3 Jiao (also known as the 3 burners), which we refer to as the upper, the middle and the lower Jiao. The 3 Jiao contain organs of Qi production, Qi distribution as well as fluid metabolism.

The San Jiao's Areas of Influence

On a physical level, each Zang and Fu has an “area of influence” which can include many obvious as well as some not so obvious aspects of physiological functioning and responsibilities. The Zang organs have greater areas of influence than the Fu.

The San Jiao has three main areas of influence:

1. Firstly, the role of the San Jiao is to control the movement of fluid between the three Jiao and in this way it is seen as the ‘official in control of the water passages’* A malfunction in this area of influence will lead to an accumulation of bodily fluids in specific parts of the body.
2. Its other main function is to circulate the Yuan Qi (Original Qi). The Yuan Qi originates in the space between the Kidneys and the San Jiao distributes it to the 12 meridians and ensures its smooth circulation.
3. Thirdly, much has been written about the San Jiao representing the three ‘burners’ of the body and the communication between these areas in terms of Qi production, Qi distribution and the movement of fluids. We will not go into great detail here, but we will briefly describe the anatomical location of each of the Jiao, the Zang and Fu organs contained in them as well as a brief description of the influence of the San Jiao on water metabolism and Qi production.

The upper Jiao

Is the section of the trunk that runs from the diaphragm to the top of the head. It contains the chest, head and neck and the organs that reside here are the Lungs, the Heart and the Pericardium.

In terms of fluid metabolism, the fluids contained in the upper Jiao are described as a **mist**. Under the influence of the San Jiao, the fluids from the Kidney and the Spleen are brought up to the Lungs in the form of a mist. This mist is then dispersed to the skin and the muscles all over the body.

In terms of the movement and production of Qi in the upper Jiao, it is here that the Wei Qi is formed and distributed.

The middle Jiao

Is the section of the trunk that runs from the diaphragm to the navel. It contains the Stomach and the Spleen.

In terms of fluid metabolism, the fluids contained in the middle Jiao are described as a **muddy pool**. This reflects the process of digestion and the separation of food and drink into pure and impure Qi.

In terms of the movement and production of Qi in the middle Jiao, it is here that the Nutritive Qi is formed and distributed to the rest of the body.

The lower Jiao

Is the section of the trunk that runs below the navel. It contains the Liver, Gall Bladder, the Urinary Bladder, the Kidneys and the Large and Small Intestines.

In terms of fluid metabolism, the fluids contained in the lower Jiao are described as a **drainage ditch**. This reflects the process of transformation and excretion of waste by the Kidneys, the Bladder and the Intestines.

*Chapter 8 - Yellow Emperor's classic

San Jiao Syndromes

Since the San Jiao does not have its own particular organ system, the pathologies of the San Jiao are mainly channel related. For diseases specific to a particular Jiao, please refer to the Zang or Fu in question (for example, for diseases of the upper Jiao, please refer to the section on syndromes of either the Heart or the Lung).

Having said that, because of where the San Jiao channel runs, the following symptoms can be addressed by stimulating points on the San Jiao channel:

- 1) Pain or inflammation in the front limb, elbow, shoulder and neck; disorders of the ear, including pain and deafness.
- 2) Symptoms arising from a malfunctioning of the San Jiao's relationship to fluid metabolism, including abdominal fullness and distention, retention of urine and edema, or patches or areas of dryness.
- 3) SJ 5 is a powerful point to expel pathogenic factors because of the San Jiao's relationship

with the circulation of Yuan Qi or Source Qi.

Excess Syndromes of the San Jiao

Since the San Jiao does not have its own particular organ system, the pathologies of the San Jiao are mainly channel related. For diseases specific to particular Jiao, please refer to Zang or Fu in question (for example, for diseases of the upper Jiao, please refer to the section on syndromes of either the Heart or the Lung).

Deficiency Syndromes of the San Jiao

Since the San Jiao does not have its own particular organ system, the pathologies of the San Jiao are mainly channel related. For diseases specific to particular Jiao, please refer to Zang or Fu in question (for example, for diseases of the upper Jiao, please refer to the section on syndromes of either the Heart or the Lung).

Introduction to the Gall Bladder

The Gall Bladder's (known as **Dan**) main function in TCM is the storage of bile for digestion and its functions are very closely related to its paired Zang, the Liver. While the Gall Bladder stores the bile, the regular and appropriate secretion of bile is reliant on the influence of the Liver Qi. (See the functions of the Liver for a deeper explanation of the digestive function of the Liver and Gall Bladder.)

The Gall Bladder and the Liver system both belong to the Wood element. Of these two organ systems within the Wood element, the Gall Bladder is the Yang organ (the Fu) and the Liver is the Yin organ (the Zang).

The Wood element is responsible for the free and unobstructed flow of Qi to ensure proper balance in the functioning of all the organs of the body as well as balanced behavioral responses to environmental stimuli. This can be broken down into the following layers:

1) **Emotional/behavioral** - A healthy Wood element brings about flexibility and leadership. It is characterized by patience and discerning the right time to act or pounce in order to get what is needed. The emotions that arise from an imbalanced Wood element are anger, impatience or irritability. The Liver in particular is responsible for the free flow of Qi resulting in an even and measured response to environmental stimuli. Obstructions would not necessarily cause a negative behavioral response in a healthy Wood element. Instead the dog would just

strategize to maneuver around the problem. In an unbalanced or disrupted Wood element however, an obstruction that blocks the way to a desired goal may result in erratic or overly aggressive behavior in the dog. As we will see in the next chapter, the Liver has a tendency to excess conditions and stagnation, which often results in this type of aggressive behavior. The Gall Bladder, on the other hand, is prone to deficiency, which results in timidity and fear.

2) **Digestive** - As we have seen, the Spleen and Stomach are the main organs in charge of the breakdown of food and the creation of Qi and Blood. In order for the organs of digestion to function properly and harmoniously, they rely on a steady, unobstructed flow of Qi from the Liver and a regular and appropriate secretion of bile from the Gall Bladder.

3) **Bile storage and secretion** - While the Gall Bladder is responsible for the storage of bile, it is the free flow of Liver Qi that ensures appropriate secretion of bile to aid digestion.

The Gall Bladder's Areas of Influence

On a physical level, each Zang and Fu has an “area of influence” which can include many obvious as well as some not so obvious aspects of physiological functioning and responsibilities. The Zang organs have greater areas of influence than the Fu.

The Gall Bladder has two main areas of influence:

1. As we have seen, the main area of influence of the Gall Bladder is, along with the Liver, to store and release bile to the Small Intestine to help with digestion. As a Fu, it is unique in that it stores a substance, a function usually associated with the Zang organs. Both the Zang and the Fu are intertwined physiologically as well as in terms of pathological syndromes. Both of these organs belonging to the Wood element are prone to Dampness and Damp Heat causing symptoms of nausea and vomiting.
2. In humans, the Gall Bladder is responsible for planning, proper judgement and having the courage to make good decisions. In dogs, as we have seen, if the Qi of the Gall Bladder is deficient, this may give rise to timidity or overly submissive behavior.

Gall Bladder Syndromes

Diseases of the Gall Bladder system can be divided into excess and deficiency syndromes. Excess syndromes tend to be acute in nature while deficiency syndromes tend to be more chronic.

Excess syndromes of the Gall Bladder system:

- 1) Damp Heat in the Gall Bladder

Deficiency syndromes of the Gall Bladder system

- 1) Gall Bladder Qi deficiency

Excess Syndromes of the Gall Bladder

1) Damp heat in the Gall Bladder

Etiology:

This can be a result of poor quality or toxic foods, infections, congenital tendencies, malformations, or tumors. Dampness and Heat together cause an inflammatory process and humans can get inflammation of the Gall Bladder (Cholecystitis) as well as gallstones. Some people with enlarged Livers can also get cancer of the Gall Bladder, which can interfere with the flow of bile. Interruption in the flow of bile through the bile duct may result in jaundice, visible in the eyes and gums.

Symptoms:

Loss of appetite, lethargy, vomiting and abdominal pain. Possible jaundice with yellowing of the sclera and gums. In some cases of inflammation and in the event of adhesions, there may be palpable swelling in the upper right abdomen. There may be fever and panting. The dog may not want to be touched.

Session principle:

Resolve Dampness, clear Heat in the Gall Bladder

Points to use:

Stimulate points to resolve Dampness and clear Heat – GB 24, GB 34, SP 9, UB 19, UB 20, UB 22

This condition can be very serious and life threatening. If you suspect that there is inflammation, infection or gallstones, it is mandatory that you refer to a veterinarian.

Deficiency Syndromes of the Gall Bladder

1) Gall Bladder Qi deficiency

Etiology:

This condition usually arises as a result of a lack of Qi and Blood flow from the Liver to nourish and 'root' the Gall Bladder. As we have seen, at least in humans, a healthy Gall Bladder gives us the will and the "gall" or courage to decide on a course of action in response to an environmental stimulus. In terms of dogs, an imbalance in this function could manifest in timid, overly fearful or submissive behavior.

Symptoms:

Cowering, difficulty following commands.

Session principle:

Harmonize Liver and Gall Bladder, nourish Liver Blood to support the Gall Bladder

Points to use:

Stimulate points to harmonize Liver and Gall Bladder – LIV 14, GB 24, GB 34, GB 41, UB 18, UB 19

Stimulate points to nourish Liver Blood – LIV 8, SP 6, UB 17, UB 18, UB 19

Introduction to the Liver

According to some sources, the Liver (known as **Gan**) sits in the middle Jiao alongside the Stomach and the Spleen and to others, it sits in the lower Jiao alongside the organs of elimination. It is primarily responsible for the uninterrupted flow of Qi around the body and for the storage of Blood.

It is paired with the Gall Bladder and both organs belong to the Wood element. Of these two organ systems within the Wood element, the Liver is the Yin organ (the Zang) and the Gall Bladder is the Yang organ (the Fu).

On both a physical and emotional level, the Wood element represents flexibility, both of the mind and emotions as well as the physical body. The emotion associated with the Wood element is anger. Dogs who exhibit unusually aggressive behavior likely have an imbalance within this element. Conversely, dogs that have a tendency to timidity or who are unusually submissive, may have a deficiency in this element.

The Liver's Areas of Influence

As we have seen, each Zang and Fu has an “area of influence” which can include many obvious as well as some not so obvious aspects of physiological functioning and responsibilities.

The Liver has 4 major areas of influence:

1. It ensures the uninterrupted flow of Qi
2. It stores the Blood
3. It controls the tendons (the sinews)
4. It opens into the eyes and manifests in the nails

1. It ensures the uninterrupted flow of Qi

Unlike in Western medicine, the Liver has less to do with detoxifying the body. Its primary and most important function in TCM is to keep the Qi moving freely, without obstruction, around the body. It is the Qi that leads the Blood in TCM, so if the Qi circulation is obstructed, there will eventually be Blood stasis. Each Zang and Fu has a direction, the correct and healthy way in which the Qi of that particular organ system flows. The Liver Qi disperses in all directions, bringing Qi to every Zang and Fu. The correct functioning of all of the Zang and Fu are dependent on a sufficient supply of Qi and Blood.

“Liver Qi stagnation” is a very common condition and can lead to the disruption of the normal functioning of all of the Zang and the Fu. The Liver Qi may become stagnant for many reasons. One of the most common reasons is the lack of appropriate emotional expression and physical movement. If a dog or a person, is constrained by external factors or is cornered into a situation where it cannot defend itself, the Liver Qi will stagnate. Remember the Wood element is responsible for flexibility. It is often aligned to the image of bamboo, swaying in the wind and being able to bend and bounce back when under extraordinary environmental conditions. Similarly, a healthy Wood element gives us the flexibility to be at ease with stresses and challenges, emotional, physical and mental, and then have grace and patience to navigate difficulties and strategize alternative responses. Having said that, too much pressure, too much stress, an environment that does not allow for flexibility (an animal in a shelter for example, subjected to confinement, constant negative stimulation from other confined animals) will create an imbalance in the Wood element and will stagnate the Liver Qi. The correct flow of the Liver Qi is also dependent on physical movement. Physical

stagnation in the case of an animal tied up for hours on end, or a dog that is never allowed to walk, like in the case of breeders in puppy mills, will cause the Liver Qi to stagnate and the animal will become frustrated.

If the Liver Qi stagnates, it may “rebel” against other Zang and Fu (also called an “invasion”). This means that it can bully other organs into also stagnating or reversing their normal directional flow. An example of this would be a dog who has diarrhea in response to a stressful situation. The Liver Qi reacts negatively to the stress, ‘invades’ the Spleen whose proper directional flow is upwards, and the Spleen Qi sinks, causing a downpour of diarrhea. Another example may be the Liver Qi invading the Lung causing immune deficiency in response to stress. The uninterrupted flow of the Liver Qi often has a direct link to poor digestive function.

Another reason which would cause the Liver Qi to stagnate would be a lack of Yin or Blood. Think of the Yin and the Blood as the oil of the body, lubricating the flow of Qi. If the Yin or the Blood of the Liver is compromised, the Qi will easily get stuck.

One of the other functions of the Liver is to assist the Gall Bladder in the secretion of bile. If this relationship is interrupted due to Liver Qi stagnation, regurgitation, vomiting and/or jaundice may occur.

In short, the main manifestations of a malfunction of the flow of Liver Qi include aggression or irritable or unpredictable behavior, poor digestive function including abdominal distention and a malfunction of other Zang and Fu which depend on the Liver Qi for their constant supply of Qi and Blood.

2. It stores the blood

Whereas the Spleen is responsible for creating the Blood and keeping it in the vessels, the Liver’s connection with the Blood is to store it. According to TCM, the Liver stores the Blood when the body is at rest, giving it a chance to replenish. The Liver then releases Blood to the meridians to feed the tendons and muscles during periods of activity. In this way, it is said that the Liver controls and coordinates the amount of Blood volume in the body at any given time. It is easy to see that if a dog is overworked, the load and the stress on the amount of Blood being supplied to the soft tissues will have an adverse affect on the Liver function (as well as the Spleen).

3. It controls the tendons (the sinews)

Remember that a key association of the Wood element is flexibility. The Liver is said to rule the tendons and/or the sinews (depending on who you read). The ability of the tendons to

move the joints in a free and smooth way depends on the Yin but mainly the Blood of the Liver. As we saw above, the Liver stores the Blood at rest and then controls its circulation to the muscles and tendons during periods of activity. If the Yin and Blood of the Liver are depleted, the tendons will become malnourished causing spasms, rigidity and stiffness.

4. It opens into the eyes and manifests in the nails

In TCM the nails are seen as an extension of the tendons. If the Blood and Yin of the tendons is depleted, the nails will become brittle and easily cracked.

Although most of the channels connect to the eyes, the eyes belong to the Liver in that they are the sense organ associated with the Liver. The structural and functional health of the eyes as with the tendons, relies on the abundance of Liver Blood and Yin. Liver Blood deficiency will lead to poor vision and Liver Yin deficiency will lead to dry eyes. If there is Heat in the Liver either from Yin deficiency or Liver Fire, the eyes will become red and irritated.

Liver Syndromes

Diseases or syndromes of the Liver system can be divided into excess and deficiency. Excess syndromes tend to be acute in nature while deficiency syndromes tend to be more chronic.

Excess syndromes of the Liver system:

1. Liver Qi stagnation
2. Liver Fire
3. Stirring of Liver Wind

Deficiency syndromes of the Liver system:

1. Liver Blood and Yin deficiency

Excess Syndromes of the Liver

1. Liver Qi stagnation

Etiology:

Constitutionally, some animals, just like people, are prone to react to stressors in an aggressive way more than others. They may just have inherited a 'woody' or livery constitution. In others, however, as we have seen, Liver Qi stagnation can arise either as a result of a dog being physically or emotionally confined and constrained or abused. Baiting a dog to be more aggressive may lead to the desired result or may result in a dog becoming very timid and fearful. Either way, as a result of excessive or long term stress, the Liver Qi will be affected in that it will become stagnant as the dog is forced to behave in a way that is counter to its inherent temperament.

Poor nutrition or the normal aging process will deplete the Yin and the Blood of the body, leading to stagnation of the Liver Qi as the flow of Qi is not lubricated by the Yin and Blood of the Liver.

Symptoms:

Aggressive or unpredictable behavior, restlessness, digestive disturbances including abdominal distention, disorders of any of the Zang and Fu that the Liver Qi invades.

Session principle:

Soothe the Liver Qi, restore the proper circulation of Qi

Harmonize any affected Zang and Fu

Points to use:

To soothe the Liver and circulate the Qi, stimulate LIV 3, LI 4, GB 34, UB 18.

To harmonize affected Zang and Fu, stimulate the Front Mu and the Back Shu points of the affected organs

2. Liver fire

Etiology:

The etiological factors creating Liver Fire are exactly the same as those of Liver Qi

stagnation. In the case of Liver Fire, there will more Heat signs, the aggression will be more intense and come in bouts and the Heat may manifest in more restlessness, panting and redness of the sclera.

Symptoms:

Aggressive or unpredictable or uncontrollable behavior, extreme restlessness, extreme thirst, red eyes.

Session principle:

Clear Heat from the Liver, calm the Shen

Points to use:

To clear Heat from the Liver, stimulate LIV 2, LI 11, KID 1, HT 3, UB 18, UB 62.

To calm the Shen, stimulate HT 7, Ren 14, UB 15, UB 44, KID 6.

3. Stirring of Liver Wind

Etiology:

Liver Wind is an internal type of Wind that ravages through the body causing shaking, vertigo, spasms and seizures. It can arise from either the roaring of Liver Fire, imagine watching a fire and the swirling of air and debris trapped in it as the flames rise. In this case, it is of an excess nature. It will have the same etiology as Liver Fire but its symptoms will include seizures and involuntary spasms or shaking, as is the erratic nature of Wind. There is also a kind of internal Liver Wind that rises when there is an insufficient Blood supply that causes 'gaps' in the flow of Qi and Blood in the meridians. This will also lead to spasms, but the hallmark symptom of this type of Wind is itching.

Symptoms:

(Excess) Seizures, shaking, uncontrollable muscle spasms, hypertonicity of the muscles and possibly some Liver Fire symptoms.

Session principle:

Extinguish Liver Wind, soothe the Liver, calm the Shen

Suggested points to use:

To extinguish Liver Wind and soothe the Liver, stimulate LIV 3, GB 20, UB 60, SI 3, DU 14,

DU 20, UB 18.

To calm the Shen, stimulate HT 7, Ren 14, UB 15, UB 44, SP 6.

Symptoms:

(Deficiency) Trembling, shaking, cold body and limbs, pale gums, seizures, muscle atrophy, itchy skin and allergies.

Session principle:

Nourish Liver Blood to extinguish Wind

Points to use:

To nourish Liver Blood, stimulate UB 17, UB 18, ST 36, SP 4, SP 6, Ren 4.

To extinguish Liver Wind, stimulate GB 20, DU 16, DU 14, DU 20, UB 18, UB 60.

Deficiency Syndromes of the Liver

1. Liver Blood and Yin deficiency

Etiology:

Poor nutrition and Spleen Qi deficiency can lead to Liver Blood deficiency, which may then lead to Liver Yin deficiency. Constitutional weaknesses along with over-breeding can lead to Kidney Essence deficiency, which in turn leads to Liver Blood deficiency, as the Essence is the foundation of the Blood. Long-term exposure to environmental stressors can, as we have seen, lead to Liver Qi stagnation, which over the long-term can create Heat in the Liver, which in turn burns up the Yin. The Yin and the Blood of the Liver are inseparable, so a deficiency of one will affect the other. The normal aging process creates a deficiency of Yin and Blood, which will lead to a malnourishment of all of the other organ systems. As we have seen, Liver Blood deficiency can lead to internal Wind.

Symptoms:

As a result of the malnourishment of the structures belonging to the Liver, Liver Blood and Yin deficiency can cause dry eyes, poor vision, shortened tendons and muscle spasms, atrophy, itchy skin, skin rashes, pale gums, dry and brittle nails/hooves, dry skin.

Session principle:

Nourish Liver Blood and Yin

Points to use:

To nourish Liver Blood and Yin, stimulate LIV 8, SP 6, UB 17, UB 18, HT 7, LIV 3.

Zang-Fu organ functions

Now that you are familiar with the Zang-Fu organs and what each of them does in the body, please make a list of each organ and list at least 3 things about each one. The list might include whether they are a Zang or a Fu organ, the orifice related to them, the element they belong to, if they have a certain job, if they create or circulate some type of Qi, etc.

For example, the Lung is a Zang organ belonging to the Metal element. The Lung is responsible for respiration, the descending and dispersing of Qi and it governs the skin.

- [See assignment](#)

Qi

Many types of Qi have been mentioned in the past two chapters. You may find your head swimming trying to keep them all straight. To assist you in learning the different types of Qi we would like you to list them all as well as any that have multiple names. Please also include where the Qi comes from.

For example:

Postnatal Qi = Acquired Qi comes from the air the dog breaths (Lung) and the food he consumes (Spleen)

Prenatal Qi = Source Qi = Original Qi comes from the sire and bitch and is stored in the Kidneys.

- [See assignment](#)

Chapter 2 Quiz

This is a gateway assignment; you must score at least 80% to complete it.

When you are ready, take this quiz on the material in Chapter Two. You *may* refer to your notes and the material (open book) during the quiz if you wish. Use the Next and Prev buttons to navigate through the quiz, changing any answers you wish, before clicking on Finished to submit. You will see your results and your score.

You may take this quiz as many times as you like. It's a good idea to review the questions you missed, or material you didn't remember. Re-read the information and try again. The repetition will help your retention of the material and show you areas to study further. Obviously, cutting corners in submitting answers will not help your progress in the course, your working knowledge of small animal acupuncture, or your performance assessment at the practicum.

You *must* pass this quiz with an 80% or better (at least 32 correct out of 40) to complete the chapter study. Take the test until you achieve this scoring range before going on to the next chapter. Your best score is retained.

Please contact your instructor with any questions.

Good luck!