

# DIAGNOSTIC POINTS: HOW USE THEM IN ACUPUNTUCTURE PRACTICE FOR DIAGNOSIS AND TREATMENT IN SMALL ANIMALS.

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#### **ABSTRACT**

The Diagnostic Points are part of the traditional examination and are one of the most important TCM tools. The Diagnostic points are the Association and Alarm points and they are special acupoints where the Zang-Fu organ Qi is distributed. Palpable sensitivity of diagnostic points can signal an imbalance in the underlying organ or along the meridian itself. They may be used in combination. Classically, sensitivity at both the association and the alarm points indicates an imbalance in the related visceral organ. In addition to diagnosis, association and alarm points can be used in treatment. The results of this examination may be used to determine the treatment strategy, can help the practitioner evaluate the clinical progress and success of therapy and find any imbalance before the disease process is evident.

#### 1. INTRODUCTION

TCMV practitioners can identify a disorder in the body by feeling for sensitive acupoints or Meridians pathways (Xie, 2005).

The Diagnostic Points are part of the traditional examination (Schoen, 2001) and are one of the most important TCM tools (Schwartz, 2008). The Diagnostic points are the Association and Alarm points (Schwartz, 2008).

A practitioner can palpate certain cutaneous points that course along the Bladder meridian, which parallels the spinal column (Schoen, 2001). These bilateral diagnostic points are located at the border of the Longisimus thoracis and Iliocostalis muscles (Schoen, 2001). Known as association points or back Shu points, they connect to each of the 12 major internal organs and meridians (Schoen, 2001).



In addition, there points are points along the lateral and ventral part of the body known as alarm points or front Mu points (Schoen, 2001). These also correspond to the same internal organs (Schoen, 2001).

The Association points and the Alarm points are special acupoints where the Zang-Fu organ Qi is distributed (Xie, 2005).

Association points and alarm points are considered diagnostic points (Schoen, 2001). Palpable sensitivity of diagnostic points can signal an imbalance in the underlying organ or along the meridian itself (Schoen, 2001 & Xie, 2005). For example, tenderness at BL13 may indicate a Lung problem, and sensitivity at CV12 indicates a Stomach disorder (Xie, 2005).

The Association points and the Alarm points may be used in combination (Xie, 2005).

Sensitivity can be manifested as a skin rippling response, growling, grunting, or crying out in pain, turning of the head toward the stimulated point, willingness to bite, and weakness (show as sitting down) (Schoen, 2001 & Schwartz, 2008).

One may wonder how to differentiate local back pain from sensitivity at an Association point related to a Zang-Fu organ (Xie, 2005). This can be difficult, but it may be partially resolved by palpating the related Alarm point when sensitivity is noted at an Association point (Xie, 2005). If both the Association and Alarm points are sensitive, one might feel more confident that the related organ in unbalanced (Xie, 2005).

Classically, sensitivity at both the association and the alarm points indicates an imbalance in the related visceral organ (Schoen, 2001). The imbalance is interpreted in traditional Chinese medical term, (i.e., the organ itself may be malfunctioning, or its interaction of checks and balances may be malfunctioning) (Schoen, 2001). For example, many cats with polyuria and polydipsia associated with chronic renal failure exhibit sensitivity at the Kidney association points (Schoen, 2001). However, cats with vomiting as a major sign of renal failure may show excruciating sensitivity at the Spleen-Pancreas point but only mild or no sensitivity at Kidney association point (Schoen, 2001). In TCM Five Element, a control system exists in which classically the Earth element (Spleen-Pancreas) keeps the Water element (Kidney) in check (Schoen, 2001). Therefore, the patient's history and TCM patterns should be considered when diagnostic points are sensitive (Schoen, 2001). Here again, more than one variable and circular thinking, as compared with linear thinking, are considered as causing the sensitivity (Schoen, 2001). The location of the sensitivity may be related to the chronicity of the problem and individual nature of the patient. To avoid confusion, lessexperienced TCM practitioners can simply consider the current sensitivity and the possible imbalance of the organ (Schoen, 2001).

In addition to diagnosis, association and alarm points can be used in treatment (Schoen, 2001). Acupuncture, aquapuncture, acupressure, or massage of these points



can be useful in treatment of the underlying imbalances (Schoen, 2001). Palpation of diagnostic points can be added to a routine physical examination for wider database, and treatment of the sensitive diagnostic points may be indicated during an interim period while more diagnostic information is being gathered (Schoen, 2001).

The results of this examination may be used to determine the treatment strategy (Xie, 2005). Performing the scan for sensitive points before and after each acupuncture treatment can help the practitioner evaluate the clinical progress and success of therapy (Xie, 2005) and find any imbalance before the disease process is evident (Schwartz, 2008).

The regular palpation made in Occidental Medicine for the evaluation of the organs can be difficult. Most of the organs are hard to palpate because they are located between the ribs such as liver and spleen. This can be easier using the Diagnostic points. The kidney is located exactly at the last free rib, as is the Alarm point, GB25.

#### 1.1.Association points

The Association points (Shu points) can be the most important points in acupuncture diagnosis (Schoen, 2001). These points are also named for the organ or meridian that they treat (Schoen, 2001). All Association points are located on the Bladder Meridian along the back about two fingers width on either side of the dorsal midline, lateral to the dorsal spinal process (Schoen, 2001). The Association Points are located in the depressions on either side of each Dorsal Spinous Process (Schwartz, 2008). Lung, Pericardium and Heart are located between the scapulas (Schwartz, 2008). Liver, Gall Bladder, Spleen and Stomach are located along the thoracic vertabrae caudal to the scapulas (Schwartz, 2008). Lateral to the lumbar vertabrae are Triple Heater, Kidney and Large Intestine (Schwartz, 2008). The Small Intestine and Bladder Association points are located in two depressions in the sacral vertebra making the palpation difficult for the acupuncturist (Schwartz, 2008). These point localizations where made based on human maps but both species have different numbers of vertebrae. Plus the innervation of Bladder and Small Intestine have different origins too (Schwartz, 2008). If there is any sensibility in these locations, it can indicate Bladder or Small Intestine problems (Schwartz, 2008).

ORGAN	ASSOCIATION POINT
Lung	B13
Pericardium	B14
Heart	BL15
Liver	BL18
Gallbladder	BL19
Spleen-Pancreas	BL20



Stomach	BL21
Triple Heater	BL22
Kidney	BL23
Large Intestine	BL25
Small Intestine	BL27

Table 1: Associations Points

## 1.2.Alarm points

There are points called alarm points that are located on the ventral abdomen (Schoen, 2001). There is an alarm point for each of the 12 Zang-Fu organs, but it may or may not lie on the same meridian for which it serves as alarm point (Schoen, 2001).

Alarm points are used in both diagnoses and treatment (Schoen, 2001). If there is sensitivity at an alarm point, it indicates a problem with that organ or meridian for which it is named (Schoen, 2001).

ORGAN	ALARM POINT
Lung	LU1
Pericardium	CV17
Heart	CV14
Liver	LIV14
Gallbladder	GB24
Spleen-Pancreas	LIV13
Stomach	CV12
Triple Heater	CV5
Kidney	GB25
Large Intestine	ST25
Small Intestine	CV4

Table 2: Alarm Points

### 1.3. Empirical points

During our practice we found out that there are two empirical points that can indicate hip problems and shoulder, elbow and neck problems also. They are TH14 and GB30.

Empirical point	Diagnoses
TH14	Shoulder, elbow and neck problem
GB30	Hip problem

Table 3: Empirical Points



# 1.4.Relationship between paravertebral sympathetic chain and acupuncture Association points

The sympathetic and the parasympathetic nervous system are parts of the autonomic nervous system. The definition for autonomic is: "Cannot be controlled by the mind". You can say that these systems work in balance with each other and directly or indirectly affect almost every structure in the body (e.g. heart rate, cardiac output, lumbar function, kidneys, blood vessels, stomach and intestines).

The sympathetic nervous system has an active "pushing" function. The parasympathetic has mainly a relaxing function.

The sympathetic nervous system is located to the sympathetic chain, which connects to skin, blood vessels and organs in the body cavity.

The autonomic nervous system is most important in two situations: emergency situations that cause stress and require us to "fight" or take "flight", and nonemergency situations that allow us to "rest" and "digest". The autonomic nervous system also acts in "normal" situations to maintain normal internal functions and works with the somatic nervous system.

Sympathetic nerves originate inside the vertebral column, toward the middle of the spinal cord in the intermediolateral cell column (or lateral horn), beginning at the first thoracic segment of the spinal cord and are thought to extend to the second or third lumbar segments. Because its cells begin in the thoracic and lumbar regions of the spinal cord, is said to have a thoracolumbar outflow. Axons of these nerves leave the spinal cord in the ventral branches of the spinal nerves, and then separate out as white rami which connect to chain ganglia extending alongside the sympathetic nervous system.

#### 1.5. How to evaluate the diagnostic points

Pain with light pressure indicates an acute condition, and pain with deep pressure indicates a chronic condition of that meridian or corresponding organ (Schoen, 2001).

To assess association (Shu) points, stand behind the animal, facing in the same direction, and use your index fingers to palpate the points using light to moderate pressure (Schoen, 2001). Sensitivity may indicate a problem in that area of the meridian as a local back problem (Schwartz, 2008) or in the underlying internal organ (Schoen, 2001).



To further explore the response, palpate the alarm (Mu) points (Schoen, 2001). Usually only light pressure is required to elicit a response (Schoen, 2001).

# 1.6.Location of the Diagnostic points

# 1.6.1. Association points:

- **BL13:** 1.5 cun lateral to the caudal border of the spinous process of the 3<sup>rd</sup> thoracic vertebra.
- **BL14:** 1.5 cun lateral to the caudal border of the spinous process of the 4<sup>th</sup> thoracic vertebra.
- **BL15:** 1.5 cun lateral to the caudal border of the spinous process of the 5<sup>th</sup> thoracic vertebra.
- **BL18:** 1.5 cun lateral to the caudal border of the spinous process of the 10<sup>th</sup> thoracic vertebra.
- **BL19:** 1.5 cun lateral to the caudal border of the spinous process of the 11<sup>th</sup> thoracic vertebra.
- **BL20:** 1.5 cun lateral to the caudal border of the spinous process of the 12<sup>th</sup> thoracic vertebra.
- **BL21:** 1.5 cun lateral to the caudal border of the spinous process of the 13<sup>th</sup> thoracic vertebra.
- **BL22:** 1.5 cun lateral to the caudal border of the spinous process of the 1<sup>st</sup> lumbar vertebra.
- **BL23:** 1.5 cun lateral to the caudal border of the spinous process of the 2<sup>nd</sup> lumbar vertebra.
- **BL25:** 1.5 cun lateral to the caudal border of the spinous process of the 5<sup>th</sup> lumbar vertebra.
- **BL28:** lateral to the 2<sup>nd</sup> sacral foramen, in the depression between the medial border of the dorsal iliac spine and the sacrum.



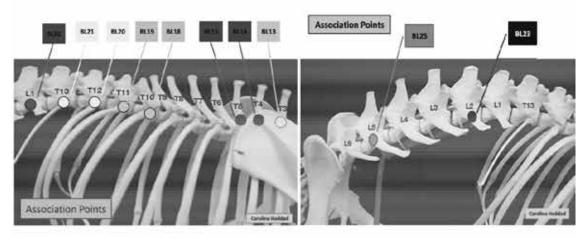


Figure 1: Association Points

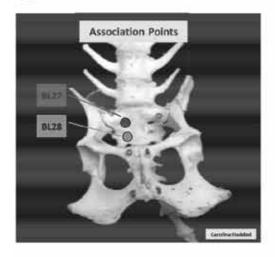


Figure 2: Association Points

Figure 3: Association Points

## 1.6.2. Alarm points:

LU1: in the first intercostal space, medial to the greater tubercle of the humerus, in the m. pectoralis superficial.

CV17: on the ventral midline, at the level of the fourth intercostal space.

CV14: halfway between CV12 and the xiphoid process, on the midline.

LIV14: in a depression in the 6<sup>th</sup> intercostal caudal to the costochondral junction of the 6<sup>th</sup> rib.

**GB24:** in a depression in the 7<sup>th</sup> intercostal space, caudal to the costochondral junction of the 7<sup>th</sup> rib.

LIV13: on the lateral side of the abdomen, below the free end of the 12th rib.



CV12: halfway between the umbilicus and the xiphoid process, on the midline.

CV5: 2 cun caudal to the umbilicus, on the midline.

**GB25:** on the lateral side of the abdomen, on the lower border of the free end of the 13<sup>th</sup> rib.

ST25: 2 cun lateral to the center of the umbilicus.

VC4: 3 cun caudal to the umbilicus, on the midline.

VC3: 4 cun caudal to the umbilicus, on the midline.

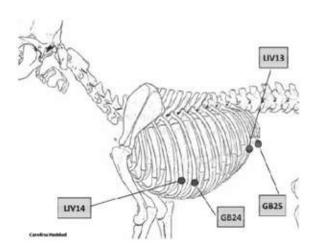


Figure 4: Alarm Points

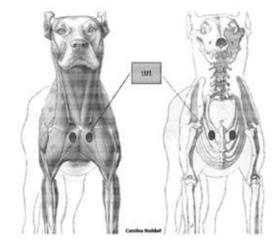


Figure 5: Alarm Points

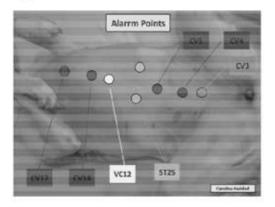


Figure 6: Alarm Points

# 1.6.3. Empirical points

**TH14:** caudal and distal to the acromium, on the caudal margin of the acromial head of the m. deltoideus.



**Hip Dysplasia Diagnostic Point:** it is an association of a trigger points located between the sartotius muscle and tensor fasciae latae muscle plus pressuring over the major trocanter.

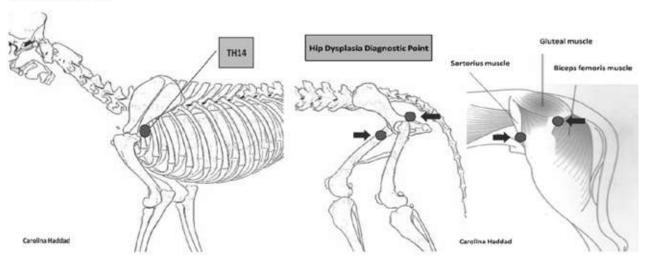


Figure 7: TH14

Figure 8: Hip Dysplasia Diagnostic Point

#### 2. EVALUATION

During our practice a hude number of animals (dogs and cats) were evaluated by palpating their Diagnostic points. Most of them came with no specific sympthoms. If they showed sensitivity other exams were required such as: X-Ray, blood test and urine samples. One of the most impressive points was the Hip Dysplasia Diagnostic Point. 100% of the animals which were sensitive at this point had alterations their hips.

The sensitivity of the Diagnostic points showed:

BL13: asthma, cough, lung edema.

BL14: heart failure.

**BL18:** ↑ ALT (alanine aminotransferase), ↑ SAP (serum alkaline phosphatase), liver tumor.

BL19: gall bladder stones

BL20: spleen tumor, vomit.

BL22: renal failure.

BL23: asthma, renal failure, kidney stones.

BL25: constipation, diarrhea, leiomioma.

BL28: urinary infection, urinary incontinence, urinary retention, bladder stones.



LU1: asthma, cough, lung edema, heart failure.

CV3: urinary infection, urinary incontinence, urinary retention, bladder stones.

CV14: heart failure.

CV12: vomit, gastritis.

CV17: heart failure.

LIV13: ↑ ALT, ↑ SAP, spleen tumor.

LIV14: ↑ ALT, ↑ SAP, liver tumor, seizure.

ST25: constipation, diarrhea.

GB25: renal failure, kidney stones.

Hip Dysplasia Diagnostic Point: hip dysplasia, hip arthroses.

TH14: neck pain, shoulder and elbow problem.

#### 3. RESULTS

The results showed that Diagnostic points present sensitivity when the organs or joints have any kind of alteration and with this information we can better choose what kind of further diagnostic exams we can ask perform (radiographs, blood or urine samples).

#### 4. DISCUSSION

Dr. Allen Schoen conducted a retrospective study of 175 patients records from 1986 to 1991 (Shoen, 2001).

Dr Cheryl Schwartz, who is the chapter author, compared the sensitivity of diagnostic points, especially the Association points, to changes in blood values. The results were:

**BL18:** 91% of the patients showed sensitivity at BL18 and concurrent rises in SAP, AST, ALT, cholesterol or bilirubin values.

**BL20:** 95% showed sensitivity at BL20 and concurrent rises in serum amylase, lipase or glucose values.

**BL15:** 75% showed sensitivity at BL15 and concurrent rises in serum CPK activity. Also, radiographs or ultrasound examination revealed cardiomyopathy in 50%.



**BL23:** 96% showed sensitivity at BL23 and concurrent rises in BUN (blood ureia nitrogen) and/ or creatinine values. In addition, 63% of the patients showed sensitivity at BL20 because they also presented with vomiting as a clinical complaint.

Comparing both results, it show that, the Diagnostic points seem to indicate an imbalance.

#### 5. CONCLUSION

The Diagnostic points can be used in the clinic and acupuncture practice by occidental veterinarians and TCM practitioners. They are important tools that can help evaluating the treatment strategy, clinical progress and success of therapy and find any imbalance before a disease process is evident. The Diagnostic points are easy to incorporate into clinical practice, quick to do and can guide which exam we can ask for.

#### 6. REFERENCES

- Schoen A. <u>Traditional Chinese Medical Diagnosis in Small Animals</u>. In: Schwartz C, ed. Veterinary Acupuncture. 2<sup>nd</sup>ed. St. Louis: Mosby, 2001: 154-160.
- Xie, H. & Preast V. <u>Diagnostic methods</u>. <u>Traditional Chinese Veterinary</u> Medicine. Fundamental Principles. Vol 1, 1996. 290 p.
- Schwartz C. Diagnostic points. <u>Four Paws Five Directions: a Guide to Chinese Medicine for Cats and Dogs. São Paulo: Ícone</u>, 2008: 74-82.
- International Veterinary Acupuncture Society. IVAS required points. IVAS Veterinary Acupuncture Course Notes. Ft. Collins, CO:2006, 3.1.1-3.1.8
- Bichard, S. & R. Sherding. Manejo do paciente. <u>Manual Sanders: Clínica de Pequenos Animais</u>. 2ªed. São Paulo: Roca, 2003: 10-11
- Lorenz, M.D. & Kornegay, J. N. Localização das lesões no sistema nervoso. Neurologia Veterinária. 4ª ed. São Paulo, Manole, 2006, 47 p.