

Kidney Qi Deficiency with Boney Bi and Wei Syndrome in a patient with Urethral Sphincter Incontinence and Degenerative Joint Disease

**Kristin K Burton-Hall, VMD, CVA, CVFT
Kidney, Geriatric, Urinary and Reproductive
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Signalment 10 ½ year old Female Spayed Newfoundland

History: She received the full series of puppy vaccines and de-worming. Ovariohysterectomy was done at 4 months of age on 3/26/2009. The patient had a gastric foreign body and secondary MRSA peritonitis in May-June of 2014. In March of 2017 the patient presented for urinary leakage while sleeping. Chemistry Panel/CBC/UA and blood pressure were WNL. The patient was started on Proin® 50mg every 12 hours due to urethral sphincter incompetence.

Owner's Complaint: The patient presented for TCVM evaluation on May 22, 2019 as the owner wanted to explore TCVM treatment as an option for the degenerative joint disease and urethral sphincter incontinence. The patient was having progressively more difficulty getting up from a down position and was occasionally needing the owner to lift her back end.

Western Physical Examination and Diagnostics: The pet was bright, alert and responsive with pink and moist mucous membranes. She had a mildly inverted vulva and a 2 cm soft movable subcutaneous mass on her left lateral thorax that had previously been aspirated as a lipoma. The patient was in good body condition at 3/5 and a of weight 112 pounds (50.9 kilograms). She was sensitive on extension of her hips bilaterally and on flexion of her left stifle. She had obvious weakness in her hind limbs and difficulty getting up from a down position. There was mild to moderate muscle atrophy of the hind limbs. She had normal proprioceptive reflexes in all four limbs. Recent diagnostics were done on April 24, 2019 because the pet had been acting odd and eating a lot of bark off of the trees. These tests included chest and abdominal radiographs/abdominal ultrasound, chemistry panel, complete blood count, urinalysis, and urine protein: creatinine ratio. These tests were within normal limits other than a slightly low BUN at 8mg/dl (9-31 mg/dl). Her urine was well concentrated with a specific gravity of 1.034 and a pH of 6.5

Western Medications: None: The owner had discontinued the Proin® 50mg sometime between March of 2017 and May of 2019.

Traditional Chinese Veterinary Medicine (TCVM) Examination: May 22, 2019 her tongue was pale pink and moist. The owner described her as not really having a temperature preference. Her ears and back were normo-thermic and her hair coat was within normal limits. Her pulse was deep and weak on both sides. The patient has an Earth constitution. She is a friendly, laid-back dog. The owner describes her as a well-behaved dog that would eagerly greet visitors to

the home but was then content, to go lay down. She always had a good appetite and had a tendency to become overweight if her food was not monitored closely.

TCVM Diagnosis May 22, 2019: Kidney *Qi* Deficiency with Boney Bi and Wei syndrome

The Kidney element is involved because of the western diagnosis of urinary incontinence and the degenerative joint disease. The weakness in her back end is also attributed to the Kidney element. The diagnosis of *Qi* Deficiency was made due to the urinary incontinence - the *Qi* is not strong enough to hold the urine. A diagnosis of Kidney *Qi* Deficiency was made due to the patient's advanced age (especially for a giant breed dog), her pale, moist tongue, and the urinary incontinence, the weakness in the hind limbs, the degenerative joint disease (DJD,) and the deep, weak pulses. The pain in the hips and left stifle along with the Kidney *Qi* Deficiency resulted in a diagnosis of Bi syndrome. A diagnosis of Wei syndrome was also made due to the atrophy and weakness in the hind limbs.

TCVM Treatment Principles:

1. Tonify Kidney *Qi* to improve urinary incontinence and Wei syndrome
2. Resolve Stagnation to alleviate

TCVM Treatment: A combination of herbal therapy, dry needle, electro-acupuncture, aqua-puncture, and food therapy (to a lesser degree) were used to treat the patient. At each treatment the electro-acupuncture was done for 10 minutes at 20 Hertz for pain and then 10 minutes at 80+120 Hertz for longer lasting pain relief and weakness.

Acupuncture^{2,4}: See Table 2

Constitutional Points: ST36

5 Element Points: SP9, BL60, BL40, KID1, KID3, KID7, ST36, GB34

Special Points: SP6, BL23, BL39, BL54, BL40, GB34, BL11, BL28

Other Points: GB29, GB30, GV14, GV20, Shen-shu, Shen-jiao, Shen-peng, Er-yan, *Jian-jiao*, *Bai-hui*

ST36 was chosen as the rear limb 3 mile point and as it is a general *Qi* Tonic and a local point for the stifles.

KID1 was chosen to treat the *Wei* syndrome and the urinary incontinence.

KID3 was chosen as it the *Yuan* source point and *Shu*-stream point for the Kidney, making it a good point for Kidney *Qi* Deficiency.

BL28 was chosen because it is the Back-*shu* association point for the Bladder and a useful point to treat urinary incontinence. The Bladder is the husband of the Kidney.

BL60 was stimulated at the same time as KID3. It is useful for treating back pain. This patient may have some underlying back pain secondary to the degenerative joint disease in the hind limbs.

BL40 was chosen as a local point for the stifles and also because it is the master point for the back and hips. It is also useful to treat urinary incontinence and was therefore a very useful point in this patient.

KID7 was chosen as it is the *Jing*- river (metal) point for tonification. One of TCVM treatment principles in this patient is to tonify Kidney.

GB29 was chosen as it is a good point for pelvic limb pain and DJD of the hip joint.

GB30 was chosen as it is a good point for pelvic limb pain and DJD of the hip joint.

GB34 was chosen as a local point for the stifles and also as the influential point for ligaments/tendons. In any large or giant breed dog with stifle pain cranial cruciate instability has to be a possible underlying case.

SP6 was chosen as it is the master point for the urogenital system/caudal abdomen and is useful for treating urinary incontinence. It is also a local point for the stifles.

SP9 was chosen because it is good for Wei syndrome, urinary incontinence and is a local point for the stifles.

BL11 was chosen as it is the influential point for bone.

BL23 is the back-*shu* association point of the Kidney, so it is very good for treating any Kidney disorder.

BL28 was a very useful point in this patient. It is the back-*shu* association point for the bladder so it is useful to treat the urinary incontinence and it is also useful for lumbosacral pain.

BL39 was used to treat the urinary incontinence and as a local point for the left stifle.

BL54 was chosen as it is the master point for the pelvic limbs and it is useful for hip problems.

GV14 was used as a local point to treat the back pain in this patient.

GV20 was chosen as a calming/permission point.

Shen-shu was used as a local point for the pelvic area and as a Kidney Qi Tonic.

Shen-jiao was used for to treat the back pain in this patient.

Shen-peng was used to treat the back pain in this patient.

Er-yan was used in this patient as a local point for lumbosacral pain.

Jian-jiao was chosen as a local point for the hips as it is useful for hip problems and pelvic limb lameness.

Bai-hui was used as a local point for the hips and back and as a calming point.

Herbal Therapy^{5, 6, 8}: Concentrated *Wu Bi Shan Yao San* 0.5 grams (Jing Tang® Herbal) 5 capsules twice daily and Concentrated Body Sore (Jing Tang Herbal®) 0.5 grams 5 capsules twice daily. See Table 1

Food Therapy: The patient was initially eating 4 cups of Purina JM® dry twice daily. The owner was unwilling to do a home-cooked or even switch to a canned diet because of the size of the dog. The owner felt either one would have been cost prohibitive. The owner was willing to top dress the dry Purina JM®.

First Acupuncture Treatment (5/22/19): Dry needle: GV20, BL23 bilateral, ST36 bilateral, BL39 bilateral, *Shen-shu* bilateral, BL54 bilateral

Response: The patient did well for the treatment but there was no immediate response or change noted.

6/3/19 Second TCVM Exam: The patient's tongue was still pale pink and wet and the pulses were deep and weak. The patient had three episodes of urinary leakage, which was about normal for her over the time period that had passed per owner. The patient was also still having difficulty getting up from a down position. There was no change to TCVM diagnosis/patterns. TCVM Pattern Diagnosis: Kidney *Qi* Deficiency with Boney Bi and Wei syndrome- no change.

Diet: The owner was feeding 3 cups of Purina JM® and top dressing with ground beef, kidney beans and yams.

Acupuncture: Dry needle: GV20, *Shen-shu* bilaterally, BL40 bilaterally EAP: BL23 on right to ST36 on right, BL23 on left to ST36 on left, BL54 on right to BL60/KID3 on right, BL54 on left to BL60/KID3 on left.

Herbal Formula: The owner was giving Concentrated *Wu Bi Shan Yao San* 0.5 grams 5 capsules twice daily and Concentrated Body Sore 0.5 grams 5 capsules twice daily. No changes were made to the herbal therapy.

6/11/19 Third TCVM Exam: The pulses were deep and weak. The patient's tongue was still pale but was purple and wet. The purple tongue color indicated stagnation. This could be apparent now because the stagnation was worsening or because as the Kidney *Qi* Deficiency was treated the stagnation was more apparent. Her back and ears were normo-thermic and she was still tender in the hips and left stifle. The patient was still having difficulty getting up and had 4 episodes of urinary leakage. TCVM Pattern Diagnosis: Kidney *Qi* Deficiency with Boney Bi and Wei syndrome. Kidney *Qi* Deficiency and the Wei Syndrome were stable but the Boney Bi was update to include a possible worsening of the stagnation due to purple in the tongue.

Diet: The diet was unchanged.

Acupuncture: Dry needle: GV20, *Bai-hui*, KID7 bilaterally, SP6 bilaterally EAP: BL11 on right to BL23 on right, BL11 on left to BL23 on left, BL54 on right to GB34 on right, BL54 on left to GB34 on left

Herbal Formula: The owner was still giving the Concentrated *Wu Bi Shan Yao San* 0.5 grams 5 capsules twice daily and was advised to continue. Concentrated Body Sore 0.5 grams 5 capsules every 12 hours was added as well to address the stagnation.

6/24/2019 Fourth TCVM Exam: The tongue was still pale purple and wet. The pulses were still deep but not as weak. The owner reported no episodes of urinary leakage since the last TCVM exam. The owner was very pleased because pet had gone on a long walk with the owner and was able to keep up with her other dog. TCVM Pattern Diagnosis: Kidney *Qi* Deficiency with Boney Bi and Wei syndrome. The Kidney *Qi* Deficiency was improving evidenced by the improvement with the urinary leakage and the Wei Syndrome was improving as evidenced by the lack of weakness on the walk. The Boney Bi Syndrome was stable since the tongue was still purple but no worse than the previous visit.

Acupuncture: Dry needle: GV20, ST36 on right, KID3/BL60 bilaterally, BL28 bilaterally, BL39 bilaterally EAP: BL23 on right to BL54 on right, BL23 on left to BL54 on left, *Shen-shu* on left to GB34 on left.

Diet: The owner was advised she could add cooked carrots, brown rice, and green peas as part of the top dressing as well.

Herbal Formula: No changes were made to the herbal therapy the Concentrated *Wu Bi Shan Yao San* 0.5 grams was continued at 5 capsules twice daily and the Concentrated Body Sore 0.5 grams 5 capsules every 12 hours was continued as well.

7/16/19 Fifth TCVM Exam: The TCVM exam showed a pale, purple, wet tongue. The patient's pulses were stronger to almost wiry. The patient's back and ears were warm. The patient was doing well at home. She had not episodes of urinary leakage and was getting around well. The patient was not as weak in the hind limbs and was not having any urinary leakage, but there was still room for improvement. TCVM Pattern Diagnosis: Kidney *Qi* Deficiency with Boney Bi and Wei syndrome- improving.

Acupuncture: Dry needle: *Bai-Hui*, *Er-yan* caudal-left, cranial-right BL39 bilaterally, SP9 bilaterally EAP: BL11 on left to *Shen-jiao* on left, BL11 on right to *Shen-jiao* on right, GB29 on left to ST36 on left, GB29 on right to ST36 on right. Aqua-puncture with 2.25 milliliters of Ichon® 100 mg/ml divided between *Jian-jiao* bilaterally was done. The owner was advised to continue Ichon® injections subcutaneously twice weekly for 3 weeks with the sixth injection to be done at the next acupuncture treatment in 3 weeks. The owner was asked to do range of motion exercises on the hind limbs and massage at KID1 and CV6. The owner was asked to do this

therapy for 10-15 minutes on each side once daily. CV6 is located on the ventral midline 1.5 cun caudal to the umbilicus. It is a useful point for Kidney *Qi* Deficiency. KID1 is good for rear limb weakness and urinary dribbling. It along with PC8 makeup the four roots of the body.

Diet: The owner was advised that she could add black sesame seeds, cooked eggs and chicken to the diet. The pet was also started on Wellactin® Canine Liquid 12 milliliters daily for a total of 3540 mg of Omega 3 Fatty acids (1740 mg of EPA and 1140 mg of DHA)

Herbal Formula: The Concentrated *Wu Bi Shan Yao San* 0.5 grams 5 capsules twice daily was continued. Concentrated Body Sore 0.5 grams 5 capsules every 12 hours was continued.

8/6/2109 Sixth TCVM Exam: The patient's tongue was purple and wet and the pulses were much stronger in general, although they were still weaker on the right compared to the left. The patient's back and ears were warm. The patient was doing well at home. The owner had not had to help her up from a down position in 6 weeks and there had been no urinary leakage in almost 2 months. The owner was also very pleased because she had not thought to mention it before but the patient would also occasionally experience fecal incontinence as well. She had not had any episodes of fecal incontinence since starting the TCVM treatments. TCVM Pattern Diagnosis: Kidney *Qi* Deficiency with Boney *Bi* and *Wei* syndrome- continued improvement.

Acupuncture: Dry needle: SP6 bilaterally, BL40 bilaterally, *Er-yan* cranial-left, caudal right EAP: *Shen-peng* on left to GB30 on left, *Shen-peng* on right to GB30 on right, ST36 on left to KID1 on left, ST36 on right to KID1 on right. The owner was advised to continue the at home exercises.

Aqua-puncture with 2.25 milliliters of Ichon® 100 mg/ml divided between *Jian-jiao* bilaterally was done.

Diet: No changes were made to the diet.

Herbal Formula: The Concentrated *Wu Bi Shan Yao San* 0.5 grams was decreased to 3 capsules twice daily and Concentrated Body Sore 0.5 grams was continued at 5 capsules every 12 hours.

8/20/2019 Seventh TCVM Exam: The patient's tongue was purple and wet and her pulses were strong. Her back and ears were warm. The owner was very pleased with how the pet was doing at home and reported no concerns. TCVM pattern diagnosis: Improving Boney *Bi* with resolving Kidney *Qi* Deficiency and resolving *Wei* Syndrome. The next TCVM exam was planned for one month.

Acupuncture: Dry needle: SP9 bilaterally, KID3/BL60 bilaterally EAP: GV14 to *Bai-hui*, ST36 on left to KID1 on left, ST36 on right to KID1 on right. BL28 on left to BL39 on left, BL28 on right to BL39 on right

Diet: No changes were made to the diet.

Herbal Formula: The Concentrated *Wu Bi Shan Yao San* 0.5 grams was maintained at 3 capsules twice daily and Concentrated Body Sore 0.5 grams was decreased to 3 capsules every 12 hours.

Case Discussion:

This patient had the classic clinical signs of Kidney *Qi* Deficiency. She had a pale pink, moist tongue and deep weak pulses. She had a western diagnosis of urinary (and occasional fecal) incontinence and degenerative joint disease. She also had pain and weakness and pain in the back and rear limbs. Pain and weakness in the lower back and rear limbs are classic for Kidney *Qi* Deficiency. The urinary and fecal incontinence one of the classic signs of Kidney *Qi* Deficiency as the Kidney controls the urethral and anal sphincters. With Kidney *Qi* Deficiency the *Qi* is not sufficient to hold the urine and stool so leakage occurs. In all patients Kidney *Qi* naturally declines with age. This patient is a giant breed dog well beyond her normal life span. She was spayed very young. The spay at a young age likely led to a *Jing* Deficiency.^{1,3,8} She also experienced a significant illness in the summer of 2014 when she had a gastro-intestinal foreign body. She developed MRSA peritonitis after surgery and had to have a second surgery. She was on amikacin and chloramphenicol for an extended period of time afterwards. This disease would have also depleted some of her *Jing*, especially because amikacin is very hard on the kidneys. Any chronic disease affects the Kidney.⁸ The early spay and the severe illness combined with her being well beyond her normal life span were likely the reasons for the Kidney *Qi* Deficiency. As the *Qi* Deficiency was being treated the patient's tongue became purple. A purple tongue indicates stagnation. This patient was also painful in the back and rear limbs. In TCVM pain equals stagnation, stagnation is not always painful but if there is pain there must be stagnation. Because of the pain/stagnation this patient had she was also diagnosed with Boney Bi syndrome. Boney Bi syndrome is characterized by chronic Bi syndrome in which the bones are getting affected. In this patient DJD of the left stifle and spondylosis of the spine where both present.^{1,8} The Kidney *Qi* Deficiency also lead to Wei syndrome in this patient. Wei syndrome is a complex of signs including weak, flaccid muscles, weak tendons and ligaments and muscle atrophy of the limbs. This patient was weak in the hind limbs, had muscle atrophy of the hind limbs and had difficulty rising from a down position. In this patient these points to treat the Wei syndrome included, the *Shen* siblings, ST 36, KID1, BL23, GB34, and KID7. *Lui-feng* was also attempted to treat the Wei syndrome but the patient would not tolerate this point.²

Multiple branches of TCVM where employed to treat this patient. Herbal therapy and acupuncture were the branches utilized the most. The patient had a good appetite and normal bowel movements so herbal therapy was a viable option.^{1,9} She took medications easily, so the large number of capsules needed because of her large size was not a concern. Concentrated *Wu Bi Shan Yao San* and Concentrated Body Sore were the two herbals used. Concentrated *Wu Bi Shan Yao San* contains herbs to tonify *Jing* and *Qi*. It is used for Kidney *Qi*/*Yang* Deficiency, urinary leakage and hind end weakness. The concentrated Body Sore is used for *Qi* and/or Blood Stagnation. It is useful for generalized pain. It invigorates *Qi* and Blood, resolves stagnation and relieves pain.^{3,5,6,9}

She had an Earth constitution so a large number of needles were used at each acupuncture session and she took longer than expected to respond to the treatments. Both stifles were also treated during the treatments because of the tendency for the contralateral cruciate ligament to develop disease within two years of the first one. Most of the points around the stifles also served multiple purposes as well – not only were they local points for the stifle but were also good for other conditions being treated such ST36 as a *Qi* tonic and BL39 for urinary incontinence.^{2,4}

Food therapy was also used as part of the treatment plan. Excellent nutrition and *Gu Qi* is very important to nourish post-natal *Jing*, with her *Jing* waning at her age and the fact she was spayed your Spleen *Qi* tonics and *Jing* tonics were added to the diet to nourish the post-natal *Jing*. Ground Beef was added to the diet to re-inforce the Spleen and enrich *Qi*. Eggs, Chicken and Black sesame seeds were added because they are all good *Jing* Tonics. Brown rice enters the Spleen and Kidney channels and was used to nourish the Kidney and regulate the Spleen. Yams were used to consolidate the Kidney *Jing* and tonify the Spleen. Carrots were also used to reinforce the Spleen. This patient did not have a Spleen Deficiency but since the Spleen is the source of post-natal *Jing*, keeping the Spleen healthy was important for this patient. The dark red kidney beans were a useful food in this particular patient. They are good to strength the Kidney and tonify *Qi*, making them useful for Kidney *Qi* Deficiency Bi/Wei syndrome. Green Peas were used to a lesser degree in this patient because of the correlation with legumes and dilated cardiomyopathy in large and giant breed dogs. They were only occasionally added when the owner had them for dinner. They are useful to tonify the Kidney.

The plan for this pet for the future includes monthly TCVM exams and acupuncture treatments. As the patient ages her TCVM pattern will change and the TCVM treatments will need to reflect that. It will be important to support her Kidneys and her Spleen as she ages. The patient resides in Western Pennsylvania and as the colder months approach the Kidney *Qi* Deficiency may very likely become more of a Kidney *Yang* Deficiency. The dosage of Concentrated *Wu Bi Shan Yao San* may need to be increased again. Tuina and Moxa maybe added to the treatment plan as well.

Table 1: Herbal Formulas: Concentrated *Wu Bi Shan Yao San*^{5, 6, 8.}

Common Name	Chinese Pin Yin	Latin Name	Part of Use	Actions
Chinese Yam	<i>Shan Yao</i>	Dioscorea	Rhizome	Tonifies Qi, tonifies <i>Jing</i>
Morinda	<i>Ba Ji Tian</i>	Morinda Officinalis	Root	Tonifies Kidney Qi, strengthens back
Poria	<i>Fu Ling</i>	Wolfiporia Cocos	Sclerotium	Drains Damp, strengthens Spleen
Rehmannia	<i>Shu Di Huang</i>	Rehmannia Glutinosa	Cured root tuber	Nourishes Yin, Blood and Jing
Schisandra	<i>Wu Wei Zi</i>	Schisandra Chinensis	Fruit	Tonifies Kidney Jing
Cyathula	<i>Chuan Niu Xi</i>	Cyanthula	Root	Tonifies Kidney Qi,

		Officinalis		Strengthens tendons/bones
Eucommia	<i>Du Zhong</i>	Eucommia Ulmoides	Stem Bark	Tonifies Kidney Yang, strengthens back
Asiatic Dogwood	<i>Shan Zhu Yu</i>	Cornus Officinalis	Fruit without seed	Nourishes Yin
Chinese Dodder	<i>Tu Si Zi</i>	Cuscuta Chinensis	Seed	Tonifies Kidney Qi and Yang
Asian Water Plantain	<i>Ze Xie</i>	Alisma Plantago- aquatica	Rhizome	Drains Damp, clear Kidney false Fire

Concentrated Body Sore (*Shen Tong Fang*)^{5, 6, 8}

Common Name	Chinese Pin <i>Yin</i>	Latin Name	Part of Use	Actions
Dong Quai	<i>Dang Gui</i>	Angelica Sinensis	Root	Activates Blood, resolves stagnation and relieves pain
Corydalis Yanhusuo	<i>Yan Hu Suo</i>	Corydalis Yanhusuo	Tuber	Moves Qi/Blood, resolves stagnation and relieves pain
Chinese Peony	<i>Chi Shao</i>	Paeonia Lactiflora	Root with bark	Relieves pain and cools Blood
Sichuan Lovage	<i>Chuan Xiong</i>	Ligusticu Sinense	Rhizome	Relieves pain and activates Blood
Pubescent Angelica	<i>Du Huo</i>	Angelica Pubescens	Root	Relieves pain and eliminates Wind-Damp
Terygium	<i>Mo Yao</i>	Commiphora Myrrha	Oleo-gum- resin	Moves Blood, Relieves pain
Notopyterygium	<i>Qiang Huo</i>	Notopterygium Incisum	Root and Rhizome	Relieves pain and activates Blood
Frankincense	<i>Ru Xiang</i>	Boswellia Sacra	Oleo-gum- resin	Moves Blood, relieves pain
Psoralea	<i>Bu Gu Zhi</i>	Cullen Corylifolium	Fruit	Strengthens back and tonifies <i>Yang</i>
Cyathula	<i>Chuan Niu Xi</i>	Cyathula Officinalis	Root	Strengthens bones and limbs
Ecommia	<i>Du Zhong</i>	Eucommi Ulmodes	Stem bark	Strengthens back and tonifies <i>Yang</i>
Safflower	<i>Hong Hua</i>	Carthamus Tinctorius	flower	Breaks down Blood stasis, relieves pain
Spatholobus	<i>Ji Xue Teng</i>	Spatholobus Suberectus	Stem	Nourishes Blood
Peach	<i>Tao Ren</i>	Prunus Persica	Seed	Nourishes Kidney and Liver
Chinese Dodder	<i>Tu Si Zi</i>	Cuscuta	Seed	Tonifies Kidney Qi and

		Chinensis		Yang
Epimedium	<i>Yin Yang Huo</i>	Epimedium Koreanum	Above ground parts or leaf	Tonifies Kidney Yang and Yin

Table 2: Acupoint Descriptions^{2, 4}:

Point	Name	Use in this Patient	Other Uses	Location	Insertion Technique
ST36	<i>Hou-san-li</i>	General <i>Qi</i> Tonic	<i>He-sea</i> (Earth) point, Master point for GI tract and abdomen, nausea, vomiting, gastric pain/ulcer, food stasis,	A long linear point, located 3 cun distal to ST35, in the belly of the cranial tibialis muscle	Oblique insertion to depth of 0.5 to 1 cun
SP6	<i>San-Yin-jiao</i>	Master point for the caudal abdomen/urogenital system/useful for urinary incontinence	3 <i>Yin</i> crossing point (SP/LIV/KID)/Tonify <i>Yin</i> due to <i>Yin</i> deficiency Blood deficiency, Damp, watery diarrhea, uterine problems	Located in a small depression on caudal border of the tibia, opposite of GB39, 3 cun proximal to the tip of the medial malleolus.	Perpendicular insertion to a depth of 1 to 1.5 cun
SP9	<i>Yin-ling-quan</i>	Urinary incontinence, stifle pain and osteoarthritis, <i>He-sea</i> point (Water)	Damp conditions, edema, diarrhea, jaundice, dysuria, <i>Yin</i> deficiency, skin itching, Clear external wind,	Located on medial side of hind limb on the lower border of the medial condyle of tibia, in the depression between the caudal border of the tibia and the gastrocnemius muscle	Perpendicular or oblique insertion to depth of 1 cun
BL11	<i>Da-zhu</i>	Influential point for bone, DJD, thoracolumbar pain,	Cough, fever, shoulder pain, cervical stiffness	Located 1.5 cun lateral to the caudal border of the dorsal	Perpendicular insertion to a depth of 0.5 to 1 cun

				spinous process of the 1 st thoracic vertebrae.	
BL23	<i>Shen-shu</i>	Back- <i>shu</i> association point for Kidney, Kidney <i>Qi</i> Deficiency, urinary incontinence, pelvic limb weakness, coxofemoral joint osteoarthritis	Renal disease, impotence, edema, thoracolumbar intervertebral disk disease, Kidney <i>Yin</i> Deficiency	Located 1.5 cun lateral to the caudal border of the dorsal spinous process of the 2 nd lumbar vertebrae.	Perpendicular insertion to a depth of 0.5 to 1 cun
BL28	<i>Pang-Gang-Shu</i>	Back- <i>shu</i> association point for Bladder, urinary incontinence, lumbosacral pain	Dysuria, diarrhea, constipation,	Between S1-S2. 1.5 cun lateral to dorsal midline. Between the sacrum and the medial border of the ilium.	Perpendicular insertion to a depth of 0.5 to 1 cun
BL39	<i>Wei-Yang</i>	Urinary dribbling, back pain,	Lower <i>He-sea</i> for Triple Heater, muscle spasms, of rear limbs	Just lateral to BL40 - on the lateral end of the popliteal crease on the caudal border of the biceps femoris tendon.	Perpendicular insertion to a depth of 1 cun
BL40	<i>Wei-zhong</i>	He-sea point for the bladder channel, Useful for stifle pain, master point for the back and hips	Autoimmune disease, vomiting, diarrhea	Located in the center of the popliteal crease.	Perpendicular insertion to a depth of 1 cun
BL54	<i>Zhi-bian</i>	Master point for the hind limbs. It is useful for hip problems and lumbar pain	Paresis/paralysis of pelvic limbs, perianal problems	Located in a depression just dorsal to the greater trochanter of the femur.	Perpendicular insertion to a depth of 1 cun
BL60	<i>Kun-lun</i>	Back pain	<i>Jing</i> -river point	In the thin	Perpendicular

			(Fire), nose-bleeding, hock pain, headache, hypertension, epilepsy	fleshy tissue between the lateral malleolus & calcaneus, level with tip of the lateral malleolus. (Opposite but slightly proximal to KID3)	r insertion to a depth of 0.5 cun
KID1	<i>Yang-quan</i>	Rear weakness, urinary dribbling	<i>Jing</i> -well point, Son point for excess, coma, sore throat, loss of voice	On the plantar surface of the pelvic limb paw, between the 3 rd and 4 th metatarsal bones underneath the central pad of the rear foot	Oblique insertion to a depth of 0.5 to 1 cun
KID3	<i>Tai-xi</i>	<i>Shu-stream</i> (Earth) point for Kidney, <i>Yuan</i> source point for Kidney, <i>Jing</i> Tonic	Renal diseases, dysuria, diabetes mellitus, irregular heat cycles, infertility, dyspnea, dental pain, thoracolumbar intervertebral disk disease, otitis	On the caudomedial aspect of the hind limb in the thin fleshy tissue between the medial malleolus and the calcaneus level with the tip of the medial malleolus. (opposite and slightly distal to BL60)	Perpendicular insertion to a depth of 0.5 cun
KID7	<i>Fu-liu</i>	<i>Jing river</i> (metal) point for tonification,	Diarrhea, edema, pelvic limb paresis or paralysis, <i>Jing</i> Tonic	On the caudomedial aspect of the hind limb 2 cun proximal to KID3, on the cranial	Perpendicular insertion to a depth of .5 cun

				border of the Achilles tendon	
GB29	<i>Ju-liao</i>	Gluteal muscle soreness, pelvic limb pain, DJD of hip joint	Pelvic limb paresis and paralysis	In the depression just cranial to the greater trochanter	Perpendicular insertion to a depth of 1-1.5 cun
GB30	<i>Huan-tiao</i>	Gluteal muscle soreness, pelvic limb pain, DJD of hip joint	Pelvic limb paresis and paralysis	In the depression midway between the greater trochanter and the tuber ischii	Perpendicular insertion to a depth of 1-1.5 cun
GB34	<i>Yang ling quan</i>	Influential point for ligaments and tendons. Useful for stifle pain and general pain, hind limb weakness. Pelvic limb weakness	<i>He-sea</i> (Earth) point, vomiting, biliary disorders	Located in a depression just cranial and distal to the head of the fibula	Oblique insertion to depth of 0.5
GV14	<i>Da-zhu</i>	Back pain	High fever, cough, asthma, cervical stiffness, hives, epilepsy, crossing point of GV and 6 Yang channels	In the depression on the dorsal midline between the C7-T1 dorsal spinous processes	Perpendicular insertion to a depth of 2 cun
GV20	<i>Bai-hui</i>	Permission/calming point	Seizure, <i>Shen</i> disturbance, headache, prolapse of the anus, crossing point of GV and BL channels	Located in a depression, on dorsal midline on a line drawn from the tips of the ears level with the center of the ear canals.	Perpendicular or oblique insertion to a depth of 0.5 cun
<i>Shen-shu</i>	Kidney Association Point	Source Qi/Kidney Qi Deficiency	Diarrhea, constipation, IVDD,	1 cun lateral to <i>Bai-hui</i>	Perpendicular or oblique insertion to a depth of 0.5

					cun
<i>Shen - peng</i>	Kidney shelf	Pelvic limb weakness/paresis	<i>Yang</i> Deficiency, diarrhea, constipation, IVDD	1 cun cranial to <i>Shen-shu</i>	Perpendicular or oblique insertion to a depth of 0.5 cun
<i>Shen - jiao</i>	Kidney corner	Pelvic limb weakness/paresis	<i>Yang</i> Deficiency, diarrhea, constipation, IVDD	1 cun caudal to <i>Shen-shu</i>	Perpendicular or oblique insertion to a depth of 0.5 cun
<i>Jian-jiao</i>	Coxa angle	Hip problems, pelvic limb lameness		In the depression just ventral to the dorsal border of the wing of the ilium	Perpendicular insertion to a depth of 1-1.5 cun
<i>Er-yan</i>	Two eyes of Sacral foramina	Lumbosacral pain, Pelvic limb weakness/paresis	Infertility, metritis	In the pelvic sacral foramina 2 pairs of bilateral points	Perpendicular or oblique insertion to a depth of 0.5 cun
<i>Bai-Hui</i>	Hundred meetings	Calming/permission point, Pelvic limb weakness	<i>Yang</i> Deficiency, diarrhea, constipation, IVDD	Between L7-S1 on dorsal midline	Perpendicular or oblique insertion to a depth of 0.5 cun

Table 3: Food Therapy Summary^{3, 7, 9}

Food	Taste Property and Meridian	Function	Indications	Other comments
Ground Beef 3 oz.=245 calories	Sweet, Neutral Enters Spleen, Stomach	Reinforce SP/ST and enrich <i>Qi</i> and Blood	Anorexia, diarrhea, edema, fatigue	Yellow cattle meat: Warm Tonify <i>Qi</i> , strengthen tendons and bones
Chicken 6oz.=285 calories	Sweet, Neutral, enters Spleen and Stomach	Enrich <i>Qi</i> and Blood; tonify Kidney and <i>Jing</i>	Spleen <i>Qi</i> Deficiency, weakness, emaciation, edema, frequent urination	Not for excess conditions. May cause time consumption may cause recurrence of old diseases

				(seizures, etc.)
Hard boiled chicken eggs 70 calories	Whole egg- Sweet, neutral	Nourish <i>Yin</i> and blood, calm <i>Shen</i> <i>Jing</i> Tonic	<i>Shen</i> disturbance, paresis, deafness, itching, abortion	Over consumption leads to GI gas
Brown Rice ½ cup = 150 calories	Cool, Sweet, enter SP, ST, KID	Regulate SP/ST, Clear Heat and nourish KID	ST <i>Yin</i> Deficiency	
Yam 1 cup = 160 calories	Sweet, Neutral	Tonify Spleen and Lung, consolidate the Kidney <i>Jing</i>	Urinary Leakage, chronic diarrhea	
Carrots (cooked) ½ cup = 30 calories	Sweet Neutral, SP, LIV, LU	Reinforces SP and LIV, aides digestion, enhances vision, sends down counter flow of <i>Qi</i> , arrests cough, clears Heat, detoxifies		
Dark Red Kidney Beans 1 cup = 210 calories	Sweet, Neutral	Strengthens Kidney and Tonify <i>Qi</i>	Kidney <i>Qi</i> Deficiency, Bi/ <i>Wei</i> Syndrome	
Green Peas (cooked) ½ cup = 70 calories	Sweet, Neutral	Tonify Kidney, Detoxify	Diabetes, Acne	
Black Sesame Seeds 1tsp = 15 calories	Sweet, Neutral, enter KID and LIV	Tonify <i>Yin</i> , <i>Jing</i> and Blood, moisten intestines	Useful to build the spirit or <i>Shen</i>	

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