Three Approaches to Acupuncture for the Treatment of Sciatica

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Abstract

Sciatica is a common ailment found within a large population across various demographics, and acupuncture may be effective in its treatment. This paper provides both biomedical and Chinese medicine analyses of sciatica, including differential diagnoses, and description of treatment methods. It includes three case studies to illustrate three different approaches in the treatment of sciatica: 1. trigger point and standard acupuncture with cupping and tuina plus chiropractic; 2. balance method and distal needle acupuncture; and 3. balance method, local point standard acupuncture, and trigger point acupuncture plus tuina. Each approach was successful in reducing sciatic pain within six treatments.
Introduction

Sciatica is a proliferating problem of 2017, as corporate pressure for higher productivity forces employees to sit for longer periods of time. Our large babyboom population (76 million births in the United States between 1946-1964) is aging, leading to a large influx of deleterious health conditions in the healthcare setting, mostly involving physical degeneration. The Mayo Clinic defines sciatica as (1):

Pain that radiates from your lower (lumbar) spine to your buttock and down the back of your leg… Discomfort almost anywhere along the nerve pathway, but it's especially likely to follow a path from your low back to your buttock and the back of your thigh and calf. The pain can vary widely, from a mild ache to a sharp, burning sensation or excruciating pain. Sometimes it can feel like a jolt or electric shock. It can be worse when you cough or sneeze, and prolonged sitting can aggravate symptoms. Usually only one side of your body is affected.

Due to the nebulous definition of sciatica, many patients present with general pain along the nerve channel, calling many myofascial imbalances “sciatica”. We hope to illustrate how to create differential diagnoses from multiple practitioners’ perspectives and treatment approaches, merging Chinese medicine with western modern medicine, illustrated by three case studies.

Sciatica describes leg pain that is localized in the distribution of one or more lumbosacral nerve roots, typically L4-S2, with or without neurological deficit. (2) However, physicians often refer to leg pain from any lumbosacral segment as sciatica. “When the dermatomal distribution is unclear, the descriptive phrase nonspecific
radicular pattern has been advocated. When initially evaluating a patient with lower back and leg pain, the physician must first determine that pain symptoms are consistent with common activity-related disorders of the spine resulting from the wear and tear of excessive biomechanical and gravitational loading that some traditionally describe as mechanical.” (2)

Prolonged sitting or standing are exacerbating factors due to the gravitational load on the lower spine. Pain is alleviated when the spine is unloaded, such as reclining, lying down, or moving. Mechanical conditions of the spine, including disc disease, spondylosis, spinal stenosis, and fractures, account for up to 98% of low back pain (LBP) cases, with the remaining ones due to systemic, visceral, or inflammatory disorders. (3)

**Differential Diagnosis: Mechanical vs. Non-Mechanical**

The following mechanisms are differential diagnoses that explain the etiologies and multiple permutations of sciatica presentations. They vary greatly, including muscle and nerve pathologies, sequella from systemic disorders, and referred pain. To further complicate matters, comorbidities could be present so two or more items below could be causing the sciatic symptoms.
Mechanical syndromes

- Disc and facet segment degeneration
- Muscular pain disorders
- Discogenic pain with or without radicular symptoms
- Radiculopathy due to structural impingement
- Axial or radicular pain due to a biochemical or inflammatory reaction to spinal injury
- Motion segment or vertebral osseous fractures
- Spondylosis with or without central or lateral canal stenosis
- Macroinstability or microinstability of the spine with or without radiographic hypermobility or evidence of subluxation (4)

Nonmechanical syndromes

- Neurologic syndromes
  - Myelopathy or myelitis from intrinsic/extrinsic structural or vascular processes
  - Lumbosacral plexopathy (e.g., diabetes, vasculitis, malignancy)
  - Acute, subacute, or chronic polyneuropathy (e.g., chronic inflammatory demyelinating polyneuropathy, Guillain-Barre syndrome, diabetes)
  - Mononeuropathy, including causalgia (e.g., trauma, diabetes)
  - Myopathy, including myositis and various metabolic conditions
  - Spinal segmental, lumbopelvic, or generalized dystonia (4)
• **Systemic disorders**
  
  o Primary or metastatic neoplasms
  
  o Osseous, discal, or epidural infections
  
  o Inflammatory spondyloarthropathy
  
  o Metabolic bone diseases, including osteoporosis
  
  o Vascular disorders (e.g., atherosclerosis, vasculitis) (4)

• **Referred pain**
  
  o Gastrointestinal disorders (e.g., pancreatitis, pancreatic cancer, cholecystitis)
  
  o Cardiorespiratory disorders (e.g., pericarditis, pleuritis, pneumonia)
  
  o Disorders of the ribs or sternum
  
  o Genitourinary disorders (e.g., nephrolithiasis, prostatitis, pyelonephritis)
  
  o Thoracic or abdominal aortic aneurysms
  
  o Hip disorders (e.g., injury, inflammation, or end-stage degeneration of the joint and associated soft tissues [tendons, bursae, ligaments]) (4)

**Prognosis**

Low back pain (LBP) is the most expensive, benign condition in industrialized countries. Experts have estimated that approximately 80% of Americans will experience LBP during their lifetimes. The annual prevalence of LBP is 15-45% of the U.S. population with a point prevalence of approximately 30%. 60% of those who suffer from acute LBP recover in six weeks and up to 80-90% recover within 12 weeks; however, the recovery of the remaining patients with LBP is less certain. (5)
Biomedical Research

Research regarding massage, acupuncture, and chiropractic work exemplifies the high efficacy regarding different aspects of spinal pain. In one clinical trial, 115 patients were enrolled at the public hospital’s multidisciplinary spinal pain unit. Manipulation achieved the best overall results, with improvements of 50% ($P = 0.01$) on the Oswestry scale. However, on the visual analog scale (VAS) for neck pain, acupuncture showed a better result than manipulation (50% vs 42%) (5). The information that can be extrapolated from this study is the capacity for chiropractic therapies to help facilitate pain management, in conjunction with acupuncture. Alone, each modality shows effective results, however if used together as a pairing of complimentary therapies, the two together can possess a synergistic relationship for pain management.

Chinese Medicine

According to the text Chinese Acupuncture and Moxibustion (6), “Low back pain is closely associated with disorders of the kidney for the lumbus is the seat of the kidney.” The most applicable differential diagnosis under traditional Chinese medicine (TCM) applies to the differentiation of kidney deficiency, which states, “The lumbar region is said to be the ‘dwelling of the house of the kidney.’ The kidney dominates the bones, and produces marrow and stores essence. When the kidney has insufficient essence, the bone is lacking of marrow, and the result is soreness and pain in the lumbar region accompanied by weakness of the knees. Over strain and stress consume essence and qi, and make the pain worse. Pain is lessened by bed rest, which makes qi quiescent.” (6)
Chinese Differential Diagnosis

In TCM, sciatica is classified as bi syndrome (Bi Zheng). Due to the overlapping anatomical location, it shares similar pathology or differential patterns with lower back pain, according to Maciocia. (8):

- Cold-dampness in the lower back and legs. Dull pain in the leg that is worse in the morning; numbness, tingling, and heavy feeling of the legs. Pain is aggravated by cold and dampness, and is relieved by heat application.
- Damp-heat in the lower back and legs. Severe pain in the leg that is worse in the afternoon or evening, numbness and tingling, and heavy and hot feeling of the legs.
- Qi stagnation and blood stasis. Severe stabbing pain in the leg that is better with movement and worse with rest or sitting during the night. Qi and blood stagnation in the channels affect the soft tissue of the lumbar, hips, and pelvis. This leads to muscle spasm and tension which trigger the shooting pain of sciatica.
- Kidney yang deficiency with dampness. Dull pain in the leg that is better with rest and worse with overexertion. Lower back pain, cold and weak knees, and heavy feeling of the legs.

Zhuang (2006) added additional differential patterns listed below (9):

- Turbid phlegm. Heavy sensation in the lower back and legs which are also cold and painful. Pain is worse on cloudy and rainy days. Patients are averse to wind, and have loose stool.
Liver-Kidney depletion. Lower back and leg pain, lack of strength, exacerbated by exertion and relieved by lying down.
  - Yang/essence deficiency. Cold and pain in the lower back and knees.
  - Yin/blood deficiency. Thirst and constipation.

**Chinese Medicine Research**

The number of clinical studies on the effectiveness of acupuncture therapy of sciatica has been increasing since the early 1990s according to Ji et al. (10) However, results have been controversial.

Acupuncture, an adjuvant analgesic modality in treating chronic pain, is a complementary treatment for many ailments and disorders. The intricate feeling of soreness, numbness, heaviness, and distension in the deep tissue beneath the acupuncture point is essentially the analgesia. The function of acupuncture is to stimulate inhibitory nerve fibers to reduce transmission of pain signals to the brain. It activates endogenous analgesic mechanisms to cause endorphin secretion per research by Cheng. (11) Endorphin, an endogenous opioid, triggers adenosine release and rapidly produces effective analgesic action on radicular sciatica. How acupuncture achieves this therapeutic effect is still unknown.

A cohort study conducted by Inoue et al. (12) found that after applying electro-acupuncture (EA) to the spinal nerve root, the patient’s sciatica symptoms were immediately reduced. Animal experiments by La et al. (13) have demonstrated that
acupuncture was a better treatment to regenerate crushed sciatic nerves than diclofenac sodium. Existing data also revealed that intervention with EA attenuated pain via regulation of expression of multiple proteins in the hypothalamus. As a result, acupuncture was concluded worthwhile for clinical application. (14) A comprehensive search and review by Ji et al. (10) of eight electronic databases including 12 studies, revealed that acupuncture is more effective than medication for individuals with sciatica in terms of clinical effectiveness, pain reduction, and increased pain threshold.

**Chinese Medicine Treatment**

Sciatica primarily affects the Gallbladder (GB) meridian of the foot shaoyang, and the Bladder (BL) meridian of the foot taiyang. Occasionally it may affect the Stomach (ST) meridian of the foot yangming. Quite often it may involve more than one channel. GB-34 (*yanglingquan*) and GB-30 (*huantiao*) are two key acupuncture points for treating sciatica. (15)

The standard acupuncture treatments, consisting of distal and local points, are listed in Table 1. The channels involved must be identified before selecting the distal points.
<table>
<thead>
<tr>
<th>Distal Point</th>
<th>Pain location or differential pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL-40 (wei zhong)</td>
<td>The pain is on the bladder channel. Has cool and reducing effects.</td>
</tr>
<tr>
<td>BL-60 (kun lun)</td>
<td>The pain is on the bladder channel and is chronic</td>
</tr>
<tr>
<td>BL-57 (cheng shan)</td>
<td>When there is underlying kidney yang deficiency.</td>
</tr>
<tr>
<td>BL-58 (fei yang)</td>
<td>The pain is in between bladder and gallbladder channel.</td>
</tr>
<tr>
<td>BL-62 (shen mai)</td>
<td>The pain starts from the hip area, radiates to the lateral side of the thigh, and then to the back of the lower leg along the bladder channel.</td>
</tr>
<tr>
<td>GB-41 (zhulinqi) or GB-40 (qiuxu)</td>
<td>The pain occurs along the gallbladder channel.</td>
</tr>
<tr>
<td>KD-4 (dazhong)</td>
<td>When there is underlying kidney deficiency.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Local Point</th>
<th>Pain location or differential pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tun zhong</td>
<td>The leg pain starts from the buttock. Insert at least 2” deep.</td>
</tr>
<tr>
<td>BL-36 (cheng fu)</td>
<td>When it’s tender point.</td>
</tr>
<tr>
<td>BL-37 (yin men)</td>
<td>When it’s tender point.</td>
</tr>
<tr>
<td>GB-30 (huantiao)</td>
<td>Insert at least 2.5” deep.</td>
</tr>
<tr>
<td>GB-31 (feng shi)</td>
<td>Effective with moxa.</td>
</tr>
<tr>
<td>GB-34 (yanglingquan)</td>
<td>The pain occurs in the lower leg. Benefits the sinews and relaxes the tendons.</td>
</tr>
</tbody>
</table>

Moxa can also be beneficial if there is no damp heat involved in the Bladder or Gallbladder channel. It is recommended to apply the heat to the Bladder channel from BL-36 (cheng fu) to BL-40 (wei zhong) until a red line appears. The best method is to use a moxa stick gently warming around each needle, and especially tun zhong (at the center of the buttock, 3.5 cun lateral to the posterior midline, on the level of the 4th sacral foramen), BL-36 (cheng fu) and BL-37 (yin men). (15)

Appropriate acupuncture points can also be found using somatotopic mapping, or the image and mirror concept, where certain body parts are projected onto different areas of the body. According to Schroeder et al., “image means in this context, that you can project a part of the body (e.g., the arm) on another part of the body (e.g., the leg) to identify a somatotopic connection. Mirror means in this context, that you also can
project an upside-down picture of one body part to another body part, to find somatotopic connections.” (16) Extrapolating from Figure 1, below, we can see that the low back/hips can be connected to the lower posterior leg or the upper posterior leg, which correspond to standard acupuncture points listed in Table 1. Also from Figure 1, we can extrapolate the connections between the spine and the lateral arm, and the midline of the scalp and the spine.

FIGURE 1 (16)

Balance Method

There are three steps to perform the balance method, so called Acupuncture 1, 2, 3 per Richard Tan. (17)

1. Identify the “sick meridian” as soon as confirm the pain location.

2. Determine the meridians that balance the “sick” meridian based on the six systems:

   a. Chinese meridian name-sharing
   b. Bie-jing/branching meridians
   c. Biao li/interior-exterior pairs
   d. Chinese clock opposites
   e. Chinese clock neighbors
   f. Treat affected meridian.
3. Choose the acupuncture points.
   a. Body imaging format: the mapping reflex between the limbs to head and trunk
   b. Mirroring format: the mapping reflex between the limbs to limbs (i.e. arms to legs)
   c. Scalp imaging: the midline of the scalp images the spine
   d. Choose the specific treatment area based on imaging and mirroring format.

Table 2 Balance Method Chart (17)

<table>
<thead>
<tr>
<th>Sick Meridian</th>
<th>System 1</th>
<th>System 2</th>
<th>System 3</th>
<th>System 4</th>
<th>System 5</th>
<th>System 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>LU</td>
<td>SP</td>
<td>BL</td>
<td>LI</td>
<td>BL</td>
<td>LV</td>
<td>LU</td>
</tr>
<tr>
<td>LI</td>
<td>ST</td>
<td>LV</td>
<td>LU</td>
<td>KD</td>
<td>ST</td>
<td>LI</td>
</tr>
<tr>
<td>SP</td>
<td>LU</td>
<td>SI</td>
<td>ST</td>
<td>SJ</td>
<td>HT</td>
<td>SP</td>
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<tr>
<td>ST</td>
<td>LI</td>
<td>PC</td>
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<td>SI</td>
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<tr>
<td>KD</td>
<td>HT</td>
<td>SJ</td>
<td>BL</td>
<td>LI</td>
<td>PC</td>
<td>KD</td>
</tr>
<tr>
<td>BI</td>
<td>SI</td>
<td>LU</td>
<td>KD</td>
<td>LU</td>
<td>SI</td>
<td>BL</td>
</tr>
<tr>
<td>PC</td>
<td>LV</td>
<td>ST</td>
<td>SJ</td>
<td>ST</td>
<td>KD</td>
<td>PC</td>
</tr>
<tr>
<td>SJ</td>
<td>GB</td>
<td>KD</td>
<td>PC</td>
<td>SP</td>
<td>GB</td>
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<tr>
<td>LV</td>
<td>PC</td>
<td>LI</td>
<td>GB</td>
<td>SI</td>
<td>LU</td>
<td>LV</td>
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<tr>
<td>GB</td>
<td>SJ</td>
<td>HT</td>
<td>LV</td>
<td>HT</td>
<td>SJ</td>
<td>GB</td>
</tr>
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</table>
System 5

1. When sciatica pain is on GB-30 (sick meridian).

2. Treat with HT meridian (Chinese clock opposite).

3. Mapping hip/thigh to opposite side upper arm. Thus, HT-1 is selected, and the treatment is extremely effective.

Piriformis syndrome, the tender muscle is on ~GB-30.

System 1

1. Sciatica pain on GB-30 and radiating down to GB meridian (IT band).

2. Balance with SJ meridian from System 1 shaoyang meridian.

3. Mapping opposite upper arm, palpate to find the tender ashi points, then needle those points. Starting from SJ-14 to 10

System 6

1. Sciatica pain on GB-30 and radiating down to GB meridian (IT band).

2. Balance with GB meridian from System 6 shaoyang meridian.

3. Mapping opposite thigh, palpate to find the tender ashi points, then needle those points. Starting from GB-31 to 33

System 3

1. Sciatica pain on GB-30 and radiating down BL meridian to BL-36 and below.

2. Balance with LU meridian from System 2 taiyin vs taiyang meridians.

3. Mapping opposite upper arm on LU meridian to find the tender ashi points. Starting from LU-2 to LU-6
Distal Needle Acupuncture (DNA)

Robert Doane, an acupuncturist in Poulsbo, Washington, combines balance method, Master Tung’s techniques, and imaging method to derive his own distal method approach in pain management and treating a variety of internal diseases. (18)

Table 3 (18)

If the muscle spasm or tightness is on the Piriformis, target foot taiyang and needle bilaterally on the following points:

<table>
<thead>
<tr>
<th>BL</th>
<th>SI</th>
<th>LU</th>
<th>KD</th>
<th>LU</th>
<th>SI</th>
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- BL-67 to 60
- KD-1 to 6
- LU-11 to 7
- SI-2 to 5

Table 4 (18)

If the pain on the external/internal oblique or transverse abdominis, target foot shaoyang and needle bilaterally:

<table>
<thead>
<tr>
<th>GB</th>
<th>SJ</th>
<th>HT</th>
<th>LV</th>
<th>HT</th>
<th>SJ</th>
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- GB-40 to 35
- LV-4 to 7
- SJ-5 to 7
- HT-7 to halfway up the lower arm
Additional Therapies (9)

- External herbal wash: decoct the herbal mixtures of Su Mu, Ze Lan, Dang Gui, Gui Zhi and Ai Ye. Wash lower back and leg with the decoction. This technique is indicated for all patterns of sciatica.
- Auricular acupuncture: sciatic nerve, shen men, and lumbosacral vertebrae.
- Electrical stimulation: administer continuous dense waves for 10 minutes at a frequency of two to five hertz. Switch to intermittent stimulation for 10 to 20 minutes with same frequency. Electrodes should not cross the spine. Inoue et al reported in the lab observation that electrical stimulation increased blood flow in the sciatic nerve in the rat. (12)
- Cupping: cup the lower back and painful area on the leg, and retain cups for 10 to 15 minutes.
- Tui Na therapy
- Functional exercises

Case Studies

The following three case studies describe the treatment of sciatic pain in patients ranging in age from 23 to 73-years-old, and exemplify the use of varying acupuncture methods.
Case 1

Patient Presentation

32 year old female

BP: 120/80 mm/hg

Resting Heart Rate: 80bpm

Temperature: 98.6 Fahrenheit

Pain VAS subjective: 7/10

Location of pain: Low Back, with radiating symptoms down leg

Additional symptoms: Referral pain down arms, occasional muscle spasms, pain on plantar fascia

Alleviating factors: Rest, reduced work hours, bikram yoga

Exacerbating factors: Standing for long periods of time

Lifestyle: Hairdresser and colorist, works nine or more hours per day, five days/week standing in three inch heels. Exercises once per week or less on average. She travels frequently, requiring her to sit for long periods of time, in contrast to work which requires her to be on her feet throughout the day. This lifestyle is exacerbating for sciatica.

Current therapies: Receives massages, once biweekly or during acute pain episodes. Primary care physician recommended an over the counter prescription of ibuprofen, not to exceed six capsules per day. Chiropractor visit frequency was once per week, with five to six regions of adjustment in all treatments, immediately preceding or following acupuncture therapy.
Diagnostic Assessment

During physical examination, referral pain could be recreated through pressing on the piriformis muscle. When the patient mimicked their posture from work during the exam, symptoms and signs of pain and tingling down legs were reproduced. The semispinalis lumbar muscles and quadratus lumborum muscles were all tender to palpation, but lacking in redness, heat, or edema locally. Main trigger points were located at insertion and attachments of the piriformis, gluteus medius and minimus, as well as medially to the sacral iliac joint, as well as the quadratus lumborum. Palpation including deep pressing with the elbow and forearm along the iliotibial tract, and gluteal region. Depression and palpation along piriformis elicited tingling and sharp pain sensations down the back of the leg to the knee. The right side appeared to exhibit more symptoms and tenderness than the left.

Manual Muscle Testing

Sideline position abduction testing, with leg straight with slight hip external rotation
Muscle Strength Grading: weakness on both sides with resistance. Passive movement: full range of motion (FROM).

Clinical Measurements at exam 1 (exam using goniometer):

Hip Internal Rotation: 50%

Hip External Rotation: FROM

VAS Scale Pain: 7/10

Frequency: 60%
Reflex hammer tapping along the spine did not create any symptoms or pain (to feasibly rule out a radiculopathy or space occupying lesion). Straight leg test was negative. Trendelenburg test was bilaterally negative. Valsalva maneuver negative.

Sitting for extended periods of time hunching over a computer screen can lead to pressure on the low back as well as shortening hip flexor muscles. "The worst posture is sitting and leaning forward, this makes you lock your pelvis and flex your spine, putting pressure on the front of the vertebrae, where your discs are. The more you arch forward and exaggerate the curve of the spine, the more pressure you're putting on your discs. This uneven pressure on a disc puts it at high risk of rupture." (19) On the opposite end of the spectrum, excessive standing during work can cause deleterious effect to the body, dependent on the type of posture the person possesses. (20) The dress code for a female cosmetologist typically includes business casual attire, which dictates footwear of high heels or boots with heels on them, thereby aligning the spine and pelvis in a deleterious way for long bouts of standing.

**Treatment**

Patient received range of motion testing and physical palpation at first and last visit. Frequency included six treatments with both acupuncture and chiropractic, once per week. Each session was done back to back with chiropractic care proceeding the acupuncture treatment. Needles used were .20mm x 30mm DBC brand needles, as well as .25mm x 100mm MAC needles, inserted at trigger points located near origin and insertions of myofascial tension. These needles were inserted via guide tube, left in at
80% depth after waiting for a Local Trigger Response (LTR). Electric Stimulation was intermittently used at a frequency of alternating 5 & 25 Hz. Cupping (moving only) followed every treatment for 15 minutes, used with tuina therapy in conjunction. Number of needles ranged from 30-80 needles, determined based on how many trigger points were found week to week.

In addition to trigger point needling, the following points which could be found in the classical texts were used: BL-43 (gaohuangshu), BL-27 (xiaochangshu) through 32 (ciliao), BL-15 (xinshu) through 25 (dachangshu), GB-34 (yanglingquan), ST-36 (zusanli), LV-3 (taichong), LI-4 (hegu), DU-20 (baihui), SJ-15 (tianliao), BL-55 (heyang), BL-58 (feiyang), HTJJ T10-L5.

Lumbar tractioning and resisted hamstring stretches were performed in the last 5 minutes for a total of 15-20 minutes per treatment. Therapeutic exercises were given for stretching the piriformis, foam rolling the iliotibial tract, and performing lumbar flexion and extension exercises.

**Results, Outcomes and Prognosis**

Subjective: Patient reported subjected relief each and every time upon return, lasting for a duration of 5-6 days post treatment. Dependent on work hours, the treatment would last longer if the patient did not put repetitive stress unto themselves in between sessions. Patient declared that treatments to her hips helped with her pain levels and ability to sleep better.
Case 2

The patient is a 73-year-old female semi-retired Catholic Sister. Her height is 5’ 2” and weight is 263 lbs. She always has a large appetite. She used to weigh 280 lbs and was successful in weight loss of 40 lbs by eating less and daily walking in 2014.

She works as a low income housing project coordinator in a non-profit organization. One of her work tasks is to collect donated groceries including breads, cereals, fruits, and vegetables from different vendors monthly to the housing food bank. She then sorts the groceries out to the shopping bags and distributes to the 92 families residing in her worksite. Moving, sorting, transporting, and delivering food bags took a big toll on her body and legs.
History, Diagnosis, and Treatment

Her medical history included atrial fibrillation, high blood pressure, hypothyroid, low back pain, depression, and seasonal allergies. She receives the following medications and supplements: 1. Verapamil 120 mg for high blood pressure, 2. Levothyroxine 50mg for hypothyroid, 3. Citalopram 40 mg for anti-depression, 4. Baby Aspirin 81 mg for heart attack prevention, 5. Fish oil, and 6. Ibuprofen for pain as needed.

She has a past history of right thigh sciatica in 2014 prior to her weight loss. That was her initial contact with Chinese medicine. The chief complaints were: right thigh sciatica that comes and goes, pain below the waist line radiating down to the shin area, and right leg pain when driving. Standard acupuncture points, tuina, and electrical acupuncture stimulation were used. She was released after eight treatments. She was motivated to lose weight, not to ease sciatica pain, but for a trip planned to South America where lots of walking was anticipated. She lost about 40 lbs then, but had gained some back after the trip.

The recurrence in July 2016 was an acute/chronic condition likely related to the stress and excessive physical demand from coordinating tasks from the food bank. The chief complaints were sudden right hip pain at GB-30 (huantiao) which radiated down the Iliotibial band (IT band) which is part of GB channel, and lower back pain. Her initial pain level was 10/10 of pain scale. She had a hard time getting up at night to go to the restroom, and in the morning. She woke frequently due to the pain. Her body
temperature was warm, energy was low, stress was high, and her tongue was dry with yellow fur. She had dry mouth at night but avoided drinking water to prevent nocturia.

The Western diagnosis was pseudo sciatica as straight-leg raise and Figure 4 crossed-leg tests were negative without provoking lower back pain. The Chinese medicine diagnosis was local qi stagnation, Liver and Kidney yin deficiency, and Kidney yang deficiency.

After applying balance method (HT-1 (jiquan), SJ-14 (jianliao), SJ-13 (naohui), SJ-12 (xiaoluo), SJ-11 (ninglengyuan), SJ-10 (tianjing), GB-31-(fengshi), GB-32 (zhongdu), and GB-33 (xiyangguan)), her pain level was reduced instantly. Distal needle acupuncture (GB-40 (qixu) to 35 (yangjiao), LV-4 (zhongfeng) to 7 (xiguan), SJ-5 (waiguan) to 7 (huizong), and HT-7 (shenmen) to halfway up to the lower arm) were palpated and added upon tenderness. The pain level was 2/10 after treatment. The same acupuncture methods were repeatedly applied every week with the same satisfactory results. Using a heating pad to relax the hip and lower back muscles and considering weight loss were suggested.

Patient reported that she did not need to take ibuprofen after the first treatment until the morning of the second appointment. On the day of the third appointment, she reported experiencing excruciating pain related to prolonged sitting over the weekend. Thus, she started range of motion sitting and stretching exercises for seniors as instructed and felt better afterwards.
In order to reduce her work related stress, she was able to hire an assistant to help her workload. By doing so, it reduced physical demand on her legs to minimize flare-ups. The patient took two weeks off and found a better chair to sit in her office. She reported 80% improvement at the 4th appointment and she was released after the fifth treatment.

Case 3
A 23-year-old female patient presented with intermittent left posterior hip and sciatic pain, with numbness down the posterior leg to the lateral foot. The patient reported that she had been experiencing sciatic pain for a few months, and that her pain level was 5/10 on the VAS.

History, Diagnosis, and Treatment
The patient worked as a receptionist in a busy chiropractic office, and her intermittent pain was triggered by sitting at a desk all day. She stated that she felt “stressed out” when she was at work due to her demanding boss. She took ibuprofen as needed to control her hip pain and occasional tension headaches. The patient did not have a regular exercise routine. She admitted to eating lots of sweets and junk food, and she was slightly overweight for her height.

The patient’s left hip pain was intermittent, but was 5/10 dull ache when it occurred. Concurrent with the hip pain was a feeling of numbness that traveled down the back of her left leg to the lateral foot. Palpation revealed that the patient’s left side gluteal and
piriformis muscles were excessively tight. Her hip ROM was within normal range. The patient’s pulse was weak and wiry, and her tongue was slightly enlarged with thin white fur and scallops.

The patient’s diagnosis was local qi and blood stasis in the GB and BL channels, Liver qi stagnation, and Spleen qi deficiency.

The course of treatment consisted of 6 visits over a two-month period. Each visit incorporated acupuncture and tuina on the low back and hips. A combination of balance method, local point standard acupuncture, and trigger point acupuncture was used. Acupuncture points differed slightly at each visit, but primarily included the following: GB-30 (huantiao), GB-31 (fengshi), GB-34 (yanglingquan), KD-3 (taixi), BL-40 (weizhong), BL-60 (kunlun), SP-9 (yinlingquan), SP-3 (taibai), and Ashi points (trigger points) at the gluteus medius.

At the first visit, the patient’s self-reported pain level was 5/10. As the visits continued, the patient stated that her peak pain level was decreasing. At the sixth visit, she stated her pain level peaked at 2/10, and the intermittent pain was occurring less frequently compared to her condition at the first visit. At the end of every visit, the patient always reported that her hip pain was reduced to 0 to 0.5/10, and that she felt much less or no numbness in the leg and foot.

Discussion
The three cases included here represent different presentations of sciatic pain, and three different approaches in its treatment: 1. trigger point and standard acupuncture with cupping and tuina plus chiropractic; 2. balance method and distal needle acupuncture; and 3. balance method, local point standard acupuncture, and trigger point acupuncture plus tuina.

The patient in Case 1 was an ideal example of local needling only. The results showed improvements from a subjective perspective, as well as measurable range of motion differences in regards to hip internal rotation, and reduction of pain. The patient responded well to local trigger point needling, and given the nature of findings objectively, her root cause of pain was due to myofascial inflammation from repetitive stress, and not that caused by a radiculopathy or space occupying lesion.

The patient in Case 2 had a more complex presentation, due to her other comorbid chronic health issues. Regardless, the patient responded well to acupuncture and she experienced vast improvement in her pain in relatively few treatments.

In Case 3, the patient reported a decrease in both pain level and frequency of occurrence. In addition, she felt much less associated numbness in the leg and foot. The successful outcome of each of these cases, despite the different approaches to treatment, illustrates two important concepts. First, acupuncture may be effective in the treatment of sciatica. Second, the effectiveness of acupuncture seems not to be dependent on any single specific technique or point protocol. This idea provides the
crux of the difficulty in designing valid acupuncture randomized controlled trial (RCT) studies. One of the strengths of acupuncture and Chinese medicine is that treatment is meant to be individualized. When the term “individualized treatment” is used, one usually thinks in terms of customizing to fit the patient’s specific needs. The other part of the equation, however, is the Chinese medicine practitioner, who draws from their own unique skills and experience to create a customized treatment. We can apply what we learn from individual case studies so that they might lead to larger scale RCT studies by continuing to document individual cases. From this pool of individual data, we may be able to find a happy medium between customized point prescriptions and a set protocol that would work in a RCT study.

**Conclusion**

From these case studies, it cannot be conclusively stated that a specific type of acupuncture can fully resolve sciatic pain. It seems apparent, however, that there is very strong evidence in subjectivity from the patient’s perspective that each of the three different approaches were successful, and that acupuncture may be effective in the treatment of sciatica.

**References**


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