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The Journal of Acupuncture and Oriental Medicine

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An Illustrated Description of SI-1 少澤 *Shao Ze*





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# MERIDIANS

The Journal of  
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Oriental Medicine

## Letter from Editor in Chief Jennifer A. M. Stone, LAc



Welcome to the 2017 spring issue of MJAOM. We are pleased to bring you another visual perspective, this time on the on the *jing well* point, SI-1, by Doctors Yair Maimon, DOM, PhD, Ac from Israel and Bartosz Chmielnicki, MD from Poland. We also present a valuable case report on the use of Chinese medicine for PCOS, a perspective on the Zhang-fu and Pranic Healing, Clinical Pearls on the treatment of asthma, a literature review on non-pharmacologic labor pain management, and an original research report assessing the proliferation of integrative medicine centers in the continental U.S. between 1998 and 2016.

Our feature manuscript is an original research report by Isabel Roth, MS and Linda Highfield, PhD, "Mapping Integrative Medicine Centers in the Continental United States Proliferation between 1998-2016 and Spatial Clustering." The researchers from the Department of Management, Policy, and Community Health at the University of Texas Health Science Center at Houston School of Public Health use ArcMAP software to map, analyze, and assess spatial clustering of 68 IM centers. The results of this analysis reveal steady a geographic proliferation of academic IM centers throughout the U.S. between 1998 and 2016.

Next we present a review by Oroma Nwanodi, MD, DHSc, "Promoting Non-Pharmacologic Labor Pain Management through Acupuncture." Nwanodi, a board certified OBGYN, reviewed literature revealing that compared to no-analgesia controls, bilateral electro-acupuncture at Hua Tuo Jia Ji and Sānyīnjīāo reduces active phase labor length, visual analog scale pain scores, and the Cesarean delivery rate,  $p < .05$ .

Case reports are a valuable resource for students and new practitioners. In this issue we present "The Combined Treatment of Anovulation Due to Polycystic Ovarian Syndrome with Electroacupuncture and Letrozole: A Case Report," by Mark VanOtterloo, LAc. It reports the successful combination of electroacupuncture and letrozole given to a twenty-seven-year-old patient to induce ovulation.

We're excited to present a unique perspective by by Jason J. Calva, Dipl Ac (NCCAOM); Glenn J. Mendoza, MD, MPH; and Shu Wang, MD, PhD, "Integrating the Zang Fu Organs of Traditional Chinese Medicine with the Chakras of Pranic Healing." The authors correlate the *zang fu* organs of traditional Chinese medicine with the eleven-chakra energy map of Pranic Healing. By offering more comprehensive treatments, they suggest that incorporating both maps of the human body into treatments might allow practitioners a better opportunity for successful healing to take places.

Clinical Pearls provide personal reports of how experienced clinicians treat a particular condition. They are a valuable resource for new practitioners. In this issue we present three robust Pearls on the diagnosis and treatment of asthma according to the philosophy of TCM.

In this issue, Doctors Yair Maimon, DOM, PhD, Ac and Bartosz Chmielnicki, MD present a perspective on the *jing well* point, SI-1, using a beautiful, hand-painted visual image to express the quality of the point, expressing that the Metal quality that enables this point to concentrate

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rich, nourishing energy flowing from the Hand *shaoyin* Heart channel. This constricting movement results in creation of Essences which are then sent to the Upper *jiao*. SI-1 is therefore famous as a point strongly promoting lactation.

As a resource for our faculty, DAOM students, and new investigators, I have prepared a short informational introduction to the NIH's Research Portfolio Online Reporting Tools website (RePORT) that provides access to reports, data, and analyses of NIH research activities, including information on NIH expenditures and the results of NIH-supported research.

As always, we invite our questions, feedback, submissions and letters to the editor: [info@meridiansjaom.com](mailto:info@meridiansjaom.com)

Jennifer Stone, LAc  
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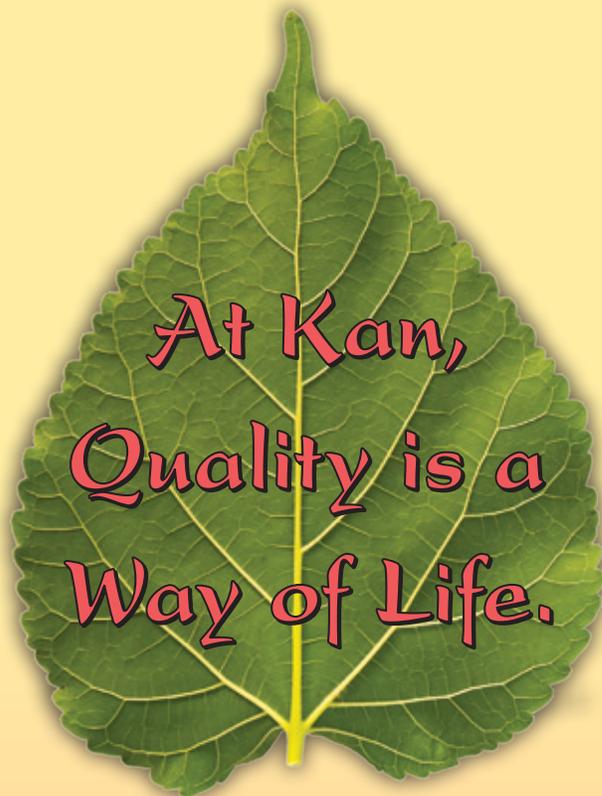
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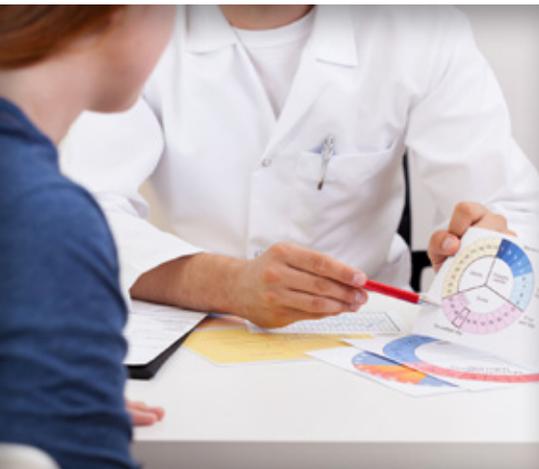
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## Case Report

# The Combined Treatment of Anovulation due to Polycystic Ovarian Syndrome with Electroacupuncture and Letrozole

By Mark VanOtterloo, LAc, DAOM

Mark VanOtterloo, LAc, DAOM began his practice, Vital Balance Acupuncture, in 2012 in Littleton, Colorado. He received his DAOM degree in 2016 from the Oregon College of Oriental Medicine in Portland, Oregon. Mark provides free community classes at various Natural Grocers in the Littleton, Colorado, area. He is a teaching faculty member at The Colorado School of Traditional Chinese Medicine and is vice president of the Acupuncture Association of Colorado. Mark's specialties include integrative medicine, chronic pain, and reproductive health for men and women. Contact him at [mark.vanotterloo@vitalbalanceacupuncture.com](mailto:mark.vanotterloo@vitalbalanceacupuncture.com).

## Abstract

Hirsutism, oligomenorrhea, amenorrhea, insulin resistance, and internal ovarian cysts are all caused by the most common female endocrine disorder, polycystic ovarian syndrome. In cases of infertility with long menstrual cycles or absent menstrual cycles, this syndrome can often be the main contributing factor to the low fecundability of women trying to conceive. For patients who have polycystic ovarian syndrome and demonstrate low fecundability, current biomedical treatment involves taking clomid, metformin, and, more recently, letrozole to stimulate ovulation. Electroacupuncture and Chinese herbal medicine treatments have also been given to induce ovulation in patients with polycystic ovarian syndrome. This case study reports the effect of electroacupuncture and letrozole given to a twenty-seven-year-old patient to induce ovulation. The patient was previously treated unsuccessfully with metformin, Chinese herbal formulas, supplements, and acupuncture. The combined use of letrozole and electroacupuncture-induced ovulation in a patient with anovulatory polycystic ovarian syndrome.

**Key Words:** polycystic ovarian syndrome, electroacupuncture, letrozole, anovulation, ovulation, acupuncture

## Biomedical Introduction to Polycystic Ovarian Syndrome

Polycystic ovarian syndrome (PCOS) is an endocrine disorder that affects women during their reproductive years.<sup>1</sup> The syndrome is often a major contributor to infertility in couples that are attempting to conceive. In cases of infertility, PCOS contributes to 75% of the cases where anovulation is the female factor.<sup>2</sup>

Diagnosis of PCOS includes a clinical exam, blood tests, and ultrasound. Indications of PCOS include obesity, visceral organ fat accumulation, hirsutism, acanthosis nigricans, and acne. Symptomatically, patients may have abnormally long menstrual cycles with an extended

time period between their menstruations. Blood tests will show excess androgens (free testosterone), and elevated hemoglobin A1c or elevated fasting blood glucose levels.

Ultrasound of the pelvis will typically find one or two internal cysts in normal women. However, women with PCOS have ten or more cysts measuring 2-9 mm in diameter.<sup>3</sup> Anti-Müllerian hormone can be used in PCOS diagnosis, since ovarian reserve levels in PCOS can become elevated.<sup>3</sup>

In clinical practice, diagnosis of PCOS can be difficult due to a lack of clear diagnostic criteria. The PCOS State Clinical Review published general guidelines for PCOS diagnosis in 2015. This includes two of these three characteristics: anovulation, hyperandrogenism, or polycystic ovaries. This diagnostic criteria is a helpful tool to identify the syndrome in patients. There still remains a debate if these criteria are complete enough to aid in the diagnosis of PCOS.<sup>4</sup>

At this time, the cause of PCOS is unclear, making contributing factors difficult to assess in a clinical setting. Recent research suggests that insulin resistance (IR), Bisphenol A (BPA), and inflammation may contribute to the disorder.<sup>4,5</sup> Insulin resistance stimulates the conversion of progesterone to androstenedione, which finally converts to testosterone causing hyperandro-

genism. BPA is an endocrine disrupting substance that binds to estrogen and androgen receptors. As a disruptor, BPA has been shown to interrupt steroidogenesis<sup>6</sup> and folliculogenesis. Inflammation causes adrenal hyperactivity which also increases the production of Dehydroepiandrosteronesuphate (DHEAS) and cortisol.<sup>4</sup> High secretion levels of DHEAS and cortisol both lead to hyperadnrogenism.

The western medical treatments of PCOS vary depending upon the situation. For patients wanting to conceive, promoting ovulation is the focus of pharmacological therapies. Clomiphene citrate (clomid) can be used to stimulation ovulation and is often given in conjunction with metformin to improve fertility and treat insulin resistance (IR).<sup>7</sup>

Recently, letrozole has been demonstrated to increase fecundability by promoting ovulation better than clomid.<sup>8</sup> This is a relatively new use of letrozole. Most fertility specialists will use clomid with metformin, since its side effects are better known due to its longer historical use. If amenorrhea is the primary concern, oral contraceptives are used to stimulate menstruation but cannot be used with women trying to conceive. Oral contraceptives lower blood androgen levels and can be helpful in suppressing hirsutism and acne.<sup>2</sup>

In summary, current theories on PCOS suppose a cumulative effect, where each cause increases a patient's susceptibility to the syndrome. Currently, the causes of PCOS are not fully understood and may vary between patients.

## TCM Introduction to Polycystic Ovarian Syndrome

From a traditional Chinese medicine (TCM) perspective, the development of PCOS involves an initial deficiency of Kidney *yang*. If this occurs for an extended period of time, eventually Dampness in the Lower Burner will develop. Dampness engenders Phlegm, and both inhibit the smooth flow of *qi* which creates Blood stasis. The Dampness and Phlegm, as well as Blood stasis, contribute to the development of ovarian cysts.

The treatment of PCOS focuses on supplementing Kidney *yang*, draining Dampness, resolving Phlegm, and/or moving Blood stasis.<sup>9</sup> Utilizing herbs during the four stages of the menstrual cycle can help to regulate the patient's cycle. The four stages are as follows: ovulatory phase, luteal phase, menstrual phase, and follicular phase. This is relevant to the treatment of PCOS because research suggests that the use of acupuncture with Chinese herbal medicine can be superior to acupuncture alone.<sup>12</sup>

In one randomized controlled trial, electroacupuncture has been demonstrated to reduce androgenic sex steroids in women

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“The patient showed no external signs of PCOS, such as hirsutism, obesity, or acanthosis nigricans. She recently was experiencing more amenorrhea rather than oligomenorrhea. Theoretically, the etiological development of her condition is most likely due to chronic inflammation rather than IR, resulting in excess androgen production. Kidney *yang* deficiency will affect every organ system, but it acutely will affect pelvic circulation first and *qi* stasis will eventually lead to Blood stasis.”

along with increasing menstrual frequency in oligomenorrheic women.<sup>10</sup> In a separate study, the benefits of low level electroacupuncture treatment were compared with physical exercise. Both physical exercise and electroacupuncture decreased oligomenorrhea and amenorrhea but the effects of EA were superior.<sup>11</sup>

A recent meta-analysis looked at the treatment of PCOS using TCM. The combined use of acupuncture, moxibustion, and Chinese herbal medicine reduced serum luteinizing hormone, follicle-stimulating hormone, testosterone, IR, and body mass index.<sup>12</sup> The researchers did identify a need for higher quality studies, since the analysis uncovered methodological errors in the evaluated controlled trials.<sup>12</sup>

## Case Description

### Case History

After discontinuing oral contraceptives, a twenty-seven-year-old female patient experienced three months of anovulation. After six months of mixed anovulation and oligomenorrhea, the patient received care from a fertility specialist obstetrician. At that time she was diagnosed with PCOS due to her elevated testosterone levels and an ultrasound, which revealed twenty-five internal cysts in the right ovary and twenty cysts in the left ovary. Her hemoglobin A1c was slightly elevated at 5.7%, but she did not demonstrate any gross signs of insulin resistance.

She was also screened for uterine, cervical, and fallopian tube abnormalities along with infections. There were no abnormalities or infections that would impact her fertility. It was concluded that sub-fertility was mainly due to her inability to ovulate consistently due to excessive blood androgen levels.

To detect ovulation, the patient recorded basal body temperature measurements (BBT) and monitored her cervical mucus. Eventually, monitoring through BBT charts became too difficult and she opted to use an ovulation test kit instead. She continued to monitor her cervical mucus. She attended regular yoga sessions as her physical exercise regimen. Before starting clomid to stimulate ovulation, she wanted to try natural solutions and consulted with our office for treatment.

### TCM Diagnosis

At her first appointment she presented with severely distended sublingual veins, which extended along three quarters of the tongue. They were swollen and dark blue. Her pulse had an overall wiry characteristic especially on the left side. Her right pulse was also weak in the *chi* position. The patient was diagnosed with Kidney *yang* deficiency due to her hidden pulse in the right *chi* position.

She was also diagnosed with severe *qi* stagnation and Blood stasis in the lower abdomen due to her severely stagnated sublingual veins and *wiry* pulse image. She did not have clinical signs of Dampness or Phlegm in her pulse or tongue. This matched with her blood work because she had no signs of IR.

The patient showed no external signs of PCOS, such as hirsutism, obesity, or acanthosis nigricans. She recently was experiencing more amenorrhea rather than oligomenorrhea. Theoretically, the etiological development of her condition is most likely due to chronic inflammation rather than IR, resulting in excess androgen production. Kidney *yang* deficiency will affect every organ system, but it acutely will affect pelvic circulation first and *qi* stasis will eventually lead to Blood stasis.

### Treatment History

The patient was prescribed a Chinese herbal formula and given supplements and acupuncture treatment to regulate the cycle by enhancing the ovulatory phase. Moon Pearls (*Jiao Ai Lizhong Tang*) was mainly used during the ovulatory phase. Moon Pearls treats Kidney *yang* deficiencies, strengthens the Spleen to remove Dampness and Phlegm, and strongly moves Blood in the lower pelvis.<sup>13</sup> Fermented cod liver oil was used to nutritionally reduce any inflammation present.<sup>14</sup> Chaste tree extract (*Vitex agnus-castus*) was introduced to promote ovulation along with flax seed oil to reduce serum testosterone levels.<sup>15,16</sup>

The patient attended weekly acupuncture treatments for two months. Her work schedule became increasingly stressful and the acupuncture treatment schedule was reduced to biweekly appointments. The same practitioner performed the acupuncture treatments with similar points used in Table 1-1. Both the needle depth and *deqi* stimulation were similar to the treatments outlined later in this case report.

Electroacupuncture was not added to the patient’s treatment at this time. The Chinese herbal formulas and nutritional supplements were taken throughout the course of the acupuncture treatment. After four months of treatment with combined Chinese herbal formulas, supplements, and acupuncture, the patient remained anovulatory.

Since the anovulation continued, she consulted with her fertility specialist for further treatment options. The patient began using a ten-day dose of progesterone to stimulate the start of a menstrual cycle. Metformin was the first medication used to stimulate ovulation. Initially she had one 14-day cycle on metformin but was unable to maintain a regular ovulation schedule while taking the medication. Her doctor then prescribed letrozole to promote ovulation. She used letrozole for a five days beginning at the third day of her menstrual cycle to stimulate ovulation. Her anovulation continued and, while taking letrozole, she returned to the clinic for treatments focused on promoting ovulation.

She was prescribed electroacupuncture to enhance the *qi*-regulating properties of acupuncture. Treatments were scheduled during the week of her ovulatory phase to enhance the normal *qi* and Blood moving properties of that phase. She discontinued the Chinese herbal medicine along with the supplements during the combined letrozole and electroacupuncture treatment.

**Methods and Materials**

DBC Spring 10 (.25mm x 40mm) Korean needles were used during treatments. TCM *deqi* sensation was elicited at each acupuncture point during stimulation. Two channels were applied from a KWD-8081 Multi-Purpose Health Device. The electrostim machine was set to 5 Hz and the intensity was increased until the patient reported a slight electric sensation. There was a slight movement at the needles at the end intensity level.

Acupuncture needles were inserted and retained for thirty minutes with electrostimulation. A TDP far infrared mineral heat lamp (KS 9800) was placed at a comfortable distance from the patient’s lower abdomen while the needles were retained.



**Acupuncture Point Selection**

Electroacupuncture was applied at Zigong M-CA-18 and Qihai Ren-6. Two needles were inserted at Qihai Ren-6 to allow the current to run bilaterally from Zigong M-CA-18 to Qihai Ren-6. Both Zigong M-CA-18 and Qihai Ren-6 were inserted 3 cm perpendicular. Zigong M-CA-18 was selected because of its direct effect on regulating the menstrual cycle, along with its *qi* regulating functions. Qihai Ren-6 was selected due to its ability to supplement Kidney *yang* along with its function in harmonizing the *qi* and Blood.<sup>17</sup>

Sanyinjiao Sp-6 was inserted perpendicular 3.5 cm as a distal point for the lower abdomen. Upon stimulation of Sanyinjiao Sp-6 the underlying muscles had a muscle fasciculation. Sanyinjiao Sp-6 did not have electric stimulation applied. Sanyinjiao Sp-6 was used in order to treat any undetected dampness, regulate menstruation, harmonize the lower *jiao*, and invigorate blood.<sup>17</sup>

**Table 17 1-1 Acupuncture Point Selection Guide**

Point	Chinese Name	Intended Functions
Gallbladder-20	<i>Fengchi</i>	Benefits the head and eyes
Liver 3	<i>Taichong</i>	Clears the head and eyes
M-CA-18	<i>Zigong</i>	Regulates menstruation and alleviates pain
M-HN-9	<i>Taiyang</i>	Eliminates Wind and clears Heat, reduces swelling, and stops pain
Ren-6	<i>Qihai</i>	Regulates <i>qi</i> and harmonizes Blood
Sanjiao-5	<i>Waiguan</i>	Expels Wind and releases the exterior, along with benefiting the head and eyes
Spleen-6	<i>Sanyinjiao</i>	Regulates menstruation

Due to work stress, the patient was also suffering from an acute tension headache, which presented on her shoulders, neck, and head along the *shaoyang* meridian bilaterally. Waiguan Sj-5 was inserted 1 cm perpendicular. Fengchi Gb-20 was inserted towards the nose slightly oblique 3 cm. Taiyang M-HN-9 was inserted perpendicular 1 cm. Waiguan Sj-5, Fengchi Gb-20, and Taiyang M-HN-9 were all used to calm her neck tension and reduce headache by eliminating wind and moving *qi*.<sup>17</sup> Since the etiology of her PCOS involved the ability of *qi* to move Blood, Taichong Liv-3 was added to the acupoint prescription to further enhance the *qi* moving properties of the overall prescription.

## Results

After one treatment she still presented with signs of Blood stasis and *qi* stagnation. Her pulse still had an overall wiry characteristic and her tongue's sublingual veins were distended. Both the wiry pulse and distended sublingual veins were less pronounced. Using her ovulation test kit, ovulation was achieved after one treatment of electroacupuncture with letrozole. With normal ovulation, this patient's fecundability greatly increased.

After a few normal ovulatory cycles, they did not conceive and her husband was assessed for fertility. His sperm counts were low enough that even with normal ovulation they were unable to conceive. The patient discontinued the use of letrozole and electroacupuncture. She maintained a regular ovulation schedule without either intervention. After moving out of state, she eventually became pregnant.

## Discussion/Conclusion

This particular PCOS patient was accurately diagnosed with the syndrome, but she did not also show the usual external clinical symptoms associated with PCOS. Since oral contraceptives are used to treat PCOS, her presentation of PCOS may have been suppressed due to her history of oral contraceptive use and it is difficult to assess when she would have presented with the syndrome. IR was not a contributing factor for this patient's PCOS.

The patient's BPA exposure was not measured during the course of treatment, which made it difficult to assess the role of BPA in her syndrome. Given her clinical signs, hyperadrenalism may have been the most likely cause to her hyperandrogenism and PCOS, although like her BPA levels, her DHEAS levels were not measured during the course of treatment.

Letrozole, when compared with clomid, has recently been demonstrated to promote more pregnancy and live birth rates in PCOS.<sup>17</sup> However, after one five-day dose of letrozole, the patient remained anovulatory. In research, one five-day dose of



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letrozole stimulated ovulation in 62.5% of PCOS women<sup>18</sup> and continued use of letrozole over the course of six cycles increased the effectiveness of letrozole by only 3%.<sup>18</sup> Continued use of letrozole increases the side effects and possible birth defects that can occur with the medication.<sup>18</sup>

The use of acupuncture and Chinese herbal medicine in research demonstrates a positive benefit for PCOS ovulation regulation.<sup>12</sup> Research also suggests that electroacupuncture can stimulate ovulation in PCOS women.<sup>10</sup> The continued use of electroacupuncture does not have side effects, but its effectiveness may be limited to women with a lower body mass index (BMI), low waist to hip circumference ratio (WHR), and basal insulin and testosterone concentrations.<sup>10</sup>

The patient in this case study was a good candidate for electroacupuncture with the exception of testosterone concentrations. With both letrozole and electroacupuncture, ovulation occurs with early use. If ovulation is not stimulated, continued use does not seem to increase the benefit of either therapy.<sup>10</sup>

The PCOS patient in this case report responded to the combined use of letrozole and electroacupuncture. This suggests there may be a summative effect from the use of both therapies. Because the combination of both therapies has not been researched, this report demonstrates that further investigation may be warranted. If both letrozole and electroacupuncture proved effective at promoting ovulation in PCOS, the use of both may be used more frequently to safely aid in increasing fertility in the PCOS woman.

### Acknowledgements

Thanks to Henry McCann, DAOM for his assistance with this report.



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# Check Out the NIH's RePORT Database

By Jennifer A. M. Stone, LAc

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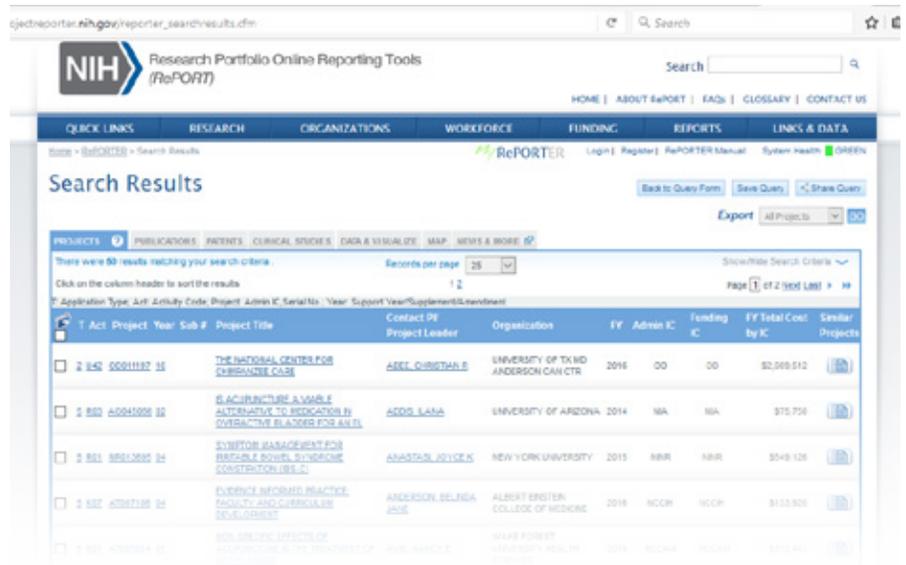
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The results page shows details of the study including PI, institution, NIH office, amount of grant the team was rewarded and more. If you click on the title, you are directed to a project information page that contains an abstract of the project and public health relevance. More tabs are provided for each project that provide information on project details, results, history, sub-projects, etc.

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# Promoting Non-Pharmacologic Labor Pain Management Through Acupuncture

By Oroma Nwanodi, MD, DHSc

Oroma Nwanodi, MD, DHSc is an obstetrician-gynecologist and an integrative medicine practitioner. She trained at Meharry Medical College and completed her residency at the University of Massachusetts and Maimonides Medical Center. She provides locum tenens services in California, Minnesota, and Wyoming. Her papers on acupuncture for vulvodynia and labor pain treatment have been published in *Chinese Medicine*. She is a member of several peer-reviewed journal editorial boards.

## Abstract

Opioid use in the United States has escalated, raising the incidence of opioid-abusing parturients and opioid-dependent newborns. This opioid abuse milieu has increased awareness of non-pharmacologic labor pain management, which is an excellent option for parturients with a history of substance abuse. Literature reviewed on this topic shows that compared to no-analgesia controls, bilateral electro-acupuncture at Hua Tuo Jia Ji and Sanyinjiao reduces active phase labor length, visual analog scale pain scores, and the Cesarean delivery rate,  $p < .05$ . While the case for acupressure and manual acupuncture may not be compelling, it is clear that parturients can benefit from expanded access to electro-acupuncture for labor pain management.

**Key Words:** acupuncture, acupressure, Cesarean delivery, electro-acupuncture, manual acupuncture, non-pharmacological labor pain management

## Introduction

Perinatal substance abuse is part of the increased prescription drug abuse milieu.<sup>1</sup> From 1992-2012, there was a 14-fold increase in the amount of opioid abuse among pregnant women receiving substance abuse treatment.<sup>2</sup> From 2004 to 2013, neonatal abstinence syndrome admissions to American neonatal intensive care units increased 3.8-fold to 27 per 1,000.<sup>3</sup>

Concurrently, labor epidural anesthesia rates as high as 82.7% have been associated with increased labor augmentation, operative vaginal deliveries, and Cesarean deliveries.<sup>4</sup> To reverse these two trends, non-pharmacologic labor pain management is part of a movement towards non-opioid analgesia.<sup>4</sup> Acupuncture's role in non-pharmacologic labor pain management was the subject of a Cochrane review in 2011, which concluded that

acupuncture and acupressure may have a role in non-pharmacologic labor pain management.<sup>5</sup> Since then, several randomized controlled trials (RCTs),<sup>6-14</sup> at least one systematic review,<sup>15</sup> and at least one meta-analysis on acupuncture for non-pharmacologic labor pain management have been published.<sup>16</sup>

## The Literature

Despite randomization, there were intervention and control groups in three RCTs that had dissimilar baseline demographic or physiologic characteristics. It is biologically plausible that differences in gravidity, parity, and amniotic membrane status could bias these studies' outcomes.<sup>6-8</sup> Fortunately, five remaining valid RCTs from China, Iran, and Sweden, ranging in size from 60 to 303 participants, adequately evaluated acupuncture for active phase Stage I labor pain management.<sup>9-14</sup> Standard acupuncture nomenclature is used to describe the studied acupoints, except for Hua Tuo Jia Ji.<sup>17</sup>

In the smallest RCT with 71 nulliparas who requested natural labor, manual acupuncture at Héngǔ (LI-4) and Sānyīnjiāo (SP-6) did not reduce pain when compared to sham acupuncture. The standard intrapartum analgesia, Fentanyl 50 mcg intravenous, was available to both groups.<sup>9</sup> Manual acupuncture was received by 32 participants, 31 participants received a sham intervention, and 8 participants did not complete the trial and were excluded from analysis. Manual acupuncture at LI-4 and SP-6 reduced mean total labor length by 118 minutes to a mean of 162 minutes, 95% Confidence Interval (CI) 146 to 177 minutes, when compared to sham acupuncture care,  $p = 0.0009$ . An RCT of 95 laboring patients found 20 to 30 minutes of bilateral manual acupuncture at LI-4 and Zu san li (ST-36) more effectively reduced pain 30 minutes after intervention than a single 50 mg intramuscular dose of meperidine as measured by a 10 cm McGill pain ruler,  $p = 0.0001$ .<sup>10</sup>

A three group RCT, with 60 nulliparas per group, compared noninvasive Han's acupoint nerve stimulator electro-acupuncture at spinal Hua Tuo Jia Ji points (TL10-L3) or Sānyīnjiāo (SP-6) to standard intrapartum care, which was not further described.<sup>11</sup> Electro-acupuncture at either TL10-L3 or SP-6 led to greater pain reduction as measured by visual analog scale pain scores at 30-minutes post intervention ( $p < 0.01$ ) and shorter Stage 1 active phase labor length ( $p < 0.05$ ) than when compared to standard care.

Overall, electro-acupuncture at TL10-L3 led to the least subsequent pain, measured at 60- and 120-minutes post intervention,  $p = 0.02$  and  $p = 0.04$ , respectively, and the quickest mean Stage 1 active labor length (33.45 minutes reduction,  $p < 0.01$ ).<sup>11</sup> Use of a single acupoint in each intervention group allowed differentiation of each acupoint's efficacy. Also, TL10-L3 may be the "go to" acupoint for patients having back labor.<sup>11</sup>

"Despite randomization, there were intervention and control groups in three RCTs that had dissimilar baseline demographic or physiologic characteristics. It is biologically plausible that differences in gravidity, parity, and amniotic membrane status could bias these studies' outcomes."

The only direct comparison of acupuncture to epidural analgesia derives from an RCT of 120 participants, randomized 30 each to Han's acupoint nerve stimulator electro-acupuncture at TL10-L3 and Ciliáo (BL 32), epidural analgesia, intravenous analgesia, and no-analgesia.<sup>12</sup> At all measured points (30- and 60-minutes post intervention, 7 to 8 cm and 10 cm dilation), electro-acupuncture recipients had lower 10-point visual analog scale pain scores than did the no-analgesia control group participants (26, 32, 30, and 30, respectively),  $p < 0.05$ .<sup>12</sup> Electro-acupuncture recipients had a 17.9-minute shorter Stage 2 labor than did epidural recipients,  $p = 0.05$ .

Any form of analgesia reduced the need for Cesarean delivery in comparison to no-analgesia,  $p < 0.05$ . Electro-acupuncture recipients had a 6.7% adverse effect rate, half that of the epidural group 13.3%,  $p < 0.05$ .<sup>12</sup> Neonatal asphyxia had the same incidence in the control and electro-acupuncture groups. Epidural analgesia was associated with hypotension, pruritus, uroschesis, and neonatal asphyxia.<sup>12</sup>

An RCT of 303 nulliparas compared 40 minutes of manual acupuncture to combined electro- and manual acupuncture or to standard care without acupuncture.<sup>13</sup> Seven to 11 acupoints and up to 21 needles were used per participant. The acupuncture interventions were repeated in two hours and then as needed. This RCT is significant for having two-month post-delivery outcomes data, having the most participants, using 40 minutes instead of 20 to 30 minutes of acupuncture, repeating the acupuncture intervention throughout active phase labor, using more than two acupoints per participant, and using up to 21 needles per participant.

Pain was measured by a 100 mm ungraded pain reporting line.<sup>13</sup> Combined electro-and manual acupuncture was 2.44 times more effective, 0.57 times less associated with epidural analgesia use, and 1.41 times more likely to have a shorter labor duration by 115 minutes than manual acupuncture alone.<sup>13</sup> In comparison to standard intrapartum care, the combined electro- and manual acupuncture intervention was 1.68 times more likely to provide sufficient analgesia and 2.1 times more likely to be recalled as providing sufficient analgesia at 2-month follow-up.<sup>13,14</sup>

Systematic review associates acupoint SP-6 with increased uterine contractility, consistent with physiologic mechanism of action by stimulating pituitary gland oxytocin release.<sup>15</sup> For those needing the fastest labor, SP-6 may be the best acupoint to use.<sup>3</sup> Systematic review associates LI-4 acupoint use with lower pain intensity scores, consistent with physiologic mechanism of action by stimulating endorphin release.<sup>15</sup>

## Discussion

Evidence-based medicine promotion requires rigorous, consistently designed RCTs that can withstand scrutiny and facilitate across study comparison.<sup>15</sup> This includes complete reporting of participant demographic, physiologic, and surgical status, inclusion of overweight and obese participants, and performance of intent to treat analysis, which is not always the case with the available RCTs. For instance, while intent to treat analysis was performed in four studies,<sup>12-14,18</sup> Four other studies did not perform intent to treat analysis.<sup>6,7,9,11</sup> As one of the underlying drivers for interest in non-pharmacologic labor pain management is to provide current or past substance abusers non-opioid labor analgesia, contrary to all the above RCTs, current and past substance abusers should be participants in studies on non-pharmacologic labor pain management.

Aside from included participant groups' expansion in terms of the number of included participants and a broader range of characteristics (for example, overweight and obese instead of just normal weight persons), there are numerous topics for future RCTs to focus on. Determining the equivalent efficacy of electro-acupuncture or manual acupuncture for labor pain management is one such topic.<sup>13,14</sup> Future studies may also indicate if acupressure at LI-4 or SP-6, or noninvasive electro-acupuncture at LI-4 should be recommended for labor pain management.<sup>6,18-19</sup> Future meta-analysis and systematic reviews should exclude studies that are non-directly comparable to acupuncture, such as studies with sterile water or TENS interventions.<sup>15,16</sup>

“For those who prefer not to expose themselves or their baby to electrical stimulation during pregnancy, bilateral manual acupuncture at LI-4 and ST-36 for 20 to 30 minutes can effectively reduce pain scores and Stage 1 active labor length from 4 cm dilation by 68 minutes in comparison to intramuscular meperidine.”

Several treatment options are clear from the above RCTs. Electro-acupuncture at BL-32 combined with TL10-L3, or TL10-L3 and/or SP-6 are reasonable options for laboring women who prefer not to use epidural or intravenous analgesia, while still wishing to use labor analgesia. Electro-acupuncture at these acupoints can reduce Stage 1 active labor length ( $p < 0.05$ ) and some post-intervention pain scores ( $p < 0.01$ ).<sup>11,12</sup>

For those who prefer not to expose themselves or their baby to electrical stimulation during pregnancy, bilateral manual acupuncture at LI-4 and ST-36 for 20 to 30 minutes can effectively reduce pain scores and Stage 1 active labor length from 4 cm dilation by 68 minutes in comparison to intramuscular meperidine.<sup>10</sup> Patients experiencing back labor may benefit most from acupuncture at TL10-L3.<sup>11</sup> When application of up to 21 acupuncture needles is acceptable, serial application of bilateral electro-acupuncture combined with manual acupuncture at multiple points can reduce labor by 115 minutes (odds ratio (OR) 1.44, 95% CI 1.06 to 1.97).<sup>13</sup>

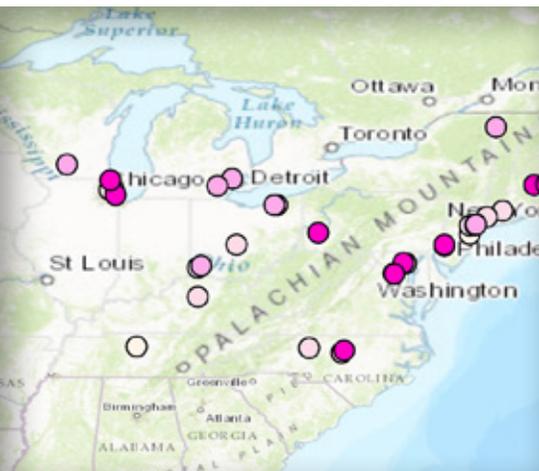
## Conclusion

There are sufficient RCTs to show that electro-acupuncture should have a role in non-pharmacologic labor pain management. Future RCTs could strengthen the argument for increased use of manual acupuncture and acupressure in non-pharmacologic labor pain management. Most of all, public awareness of the availability and efficacy of electro-acupuncture should be increased.

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# Mapping Integrative Medicine Centers in the Continental United States: PROLIFERATION BETWEEN 1998-2016 AND SPATIAL CLUSTERING



By Isabel Roth, MS and  
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Linda Highfield is currently an assistant professor at the University of Texas Health Science Center at Houston (UTHealth) in the Department of Management, Policy, and Community Health where she teaches geographic information system sciences.

## Abstract

**Introduction:** In 1998, the United States Congress authorized the creation of the Office of Alternative Medicine within the National Institutes of Health, dramatically increasing the amount of federal funding supporting research in integrative health and medicine. However, few geographic analyses have characterized the subsequent growth of integrative medicine (IM) centers in the US. This study aimed to assess the proliferation of IM centers in the continental U.S. between 1998 and 2016 to quantify how many centers existed during that period and to investigate their distribution.

**Methods:** To determine the number of locations, a list of IM centers was compiled by combining the list of centers evaluated in a Bravewell Collaborative Report with the membership list of the Academic Consortium for Integrative Health and Medicine. The centers were then geocoded and mapped using ArcMAP software, and an average nearest neighbor analysis was performed to assess spatial clustering.

**Results:** Sixty-seven centers were evaluated and founding dates were identified for 58 of 67 centers (87%). Of the 58 centers evaluated, there was 341% growth from 1998-2016. Results of the average nearest neighbor analysis indicate that all 67 centers are highly clustered ( $z = -6.83, p = 0.00$ ).

**Discussion:** The results of this analysis reveal steady geographic proliferation of academic IM centers throughout the U.S. between 1998 and 2016. Centers are predominantly clustered on the east and west coasts. The results are confined to academic IM centers and do not include Veteran's Administration hospitals. However, these findings highlight a disparity in geographic accessibility to academic IM centers in the U.S.

**Conclusion:** Although there is a lack of definitive knowledge on the extent of IM centers in the U.S., and very limited spatial analysis of integrative medicine proliferation and new sites, the current study provides an important step in building a knowledge base on this issue. Further exploratory geographic analyses are needed in this area.

**Key Words:** complementary therapies, integrative medicine, geographical information systems, spatial analysis, spatio-temporal analysis

## Introduction

For patients with chronic diseases, many are looking for interactions with healthcare providers, that, when a cure is not available, provide guidance on improving quality of life.<sup>1</sup> This may mean including complementary and alternative medicine practitioners as part of a chronically ill patient's healthcare team.<sup>2</sup> A growing body of knowledge has been accumulating about the use of complementary and alternative medicine (CAM) in the U.S. population. CAM refers to a wide range of practices, typically including mind-body practices such as yoga, meditation, acupuncture, and massage, and natural products such as dietary supplements, herbs, homeopathic remedies, tinctures, and teas.

The term "complementary" implies *in addition* to western, or conventional, medicine, while the term "alternative" implies *instead of* conventional medicine (CM).<sup>3</sup> In their landmark study, Eisenberg, et al. first characterized the widespread use of CAM by Americans.<sup>4</sup> In 1990, 33.8% of Americans had used at least one form of alternative medicine in the previous year, and by 1997, that number had increased to 42.1% of the U.S. adult population.<sup>4</sup> A follow-up study confirmed a steady prevalence of CAM use from 1997-2002, at around 35% of the total U.S. population.<sup>5</sup>

Taking note of this growing trend, in 1998 the U.S. Congress authorized the creation of the Office of Alternative Medicine within the National Institutes of Health (NIH).<sup>6</sup> Now called the National Center for Complementary and Integrative Health (NCCIH), it spends \$124.4 million annually.<sup>6</sup> Their research focuses on mind-body interventions as well as natural products. NCCIH also funds career development awards and provides ongoing funding to research institutions whose projects align with the center's mission and vision. The growth of NCCIH has coincided with a growing focus on building research capacity

"In 1990, 33.8% of Americans had used at least one form of alternative medicine in the previous year, and by 1997, that number had increased to 42.1% of the U.S. adult population. A follow-up study confirmed a steady prevalence of CAM use from 1997-2002, at around 35% of the total U.S. population."



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among the CAM disciplines.<sup>7</sup> This includes increased focus on research on whole systems, such as acupuncture and Oriental medicine, yet little work has been done to assess the changing research and healthcare landscape following the creation of this unique funding body in the United States.

In Canada, distance to CAM and CM providers using actual road distances and drive-times was investigated.<sup>8</sup> Final results included not only accessibility information but also data on diversity of providers available in a given census subdivision. This analysis comes out of a need presented in the literature for greater spatial analysis of access to care in rural areas and an expansion of the traditional definition of “access to care.”

Another study from New South Wales, Australia, looked at the accessibility to CAM providers compared to the accessibility of CM providers.<sup>9</sup> The authors looked specifically at density of CAM providers in New South Wales, Australia, and examined ratios of CAM providers to general practitioners (GPs). In some areas, the authors found that there was a greater CAM provider density compared to GPs. However, they also found that it was difficult to equate provider density to actual provision of care, particularly because CAM providers tend to spend more time with each patient. In both studies, CAM practitioners, such as chiropractors, naturopaths, and homeopaths, were included to expand the definition of “access to care.” Both studies investigated distribution of CAM providers in rural areas and may represent a step towards explaining high CAM use in rural areas.

Altogether, very little geographic analysis has been conducted related to integrative medicine centers (IM) and fewer still in the United States. One study that stands apart investigated the implementation of integrative care using tele-education in military medicine services.<sup>10</sup> The program used a hub and spoke model with larger medical centers at military bases serving as hubs, and smaller military hospitals acting as spokes. The investigators mapped the locations where integrative patient care was being provided, but no further geographic analysis was conducted.

In a step towards characterizing IM in the U.S. outside of the military system, the Bravewell Collaborative, a philanthropic group dedicated to furthering evidence-based IM, issued a comprehensive report in 2011.<sup>11</sup> The report included a map of IM Centers in the U.S. as well as a summary of the state of the field. The authors included 29 centers and the report focused on clinical care models and treatments.

Another group central to coalescing information about IM in the U.S. is the Academic Consortium for Integrative Medicine and Health, a group of IM Centers from North America.<sup>12</sup> To become a member, each member organization must have a significant

program in education, research, or clinical integrative medicine and must have at least two of the three stated categories.

The current study aimed to assess if IM centers proliferated in the continental United States between 1998 and 2016 by assessing how many centers existed in the continental U.S. in 1998, 2004, 2010, and 2016. Also investigated was whether or not the centers were randomly distributed or clustered in certain geographic regions over these time periods. The spread and distribution of IM centers is indicative of geographic trends in the field. Because IM centers are hubs of research, education, and clinical practice of IM, the proliferation and clustering of these centers may be indicative of trends in IM at large.

## Methods

The initial step in creating the following maps was to compile a list of integrative medicine centers in the continental United States. The list was compiled by combining the list of centers evaluated in the Bravewell Collaborative Report, “Integrative Health in America,” with the membership list of the Academic Consortium for Integrative Health and Medicine (The Consortium). There was significant overlap between the two lists, and it should be noted that the full membership of The Consortium includes members throughout North America.

We chose to exclude member organizations outside of the continental U.S. as well as Veterans Administration Hospitals (VA). There were not sufficient resources to confirm the practice of IM at the many VA hospitals in U.S. Information was directly obtained from the Bravewell report authors about what year each IM center was founded as well as the websites for centers not included in the Bravewell report. Years founded were then coded based on their existence in 1998, 2004, 2010, 2016 (0=did not exist, 1=existed).

Center websites were also evaluated to identify which CAM techniques were mentioned and whether acupuncture was referred to specifically. ArcGIS Software was used to create the maps. An Excel database containing information on location and year of founding was geocoded using the World Geocoding Service. The resulting points were projected to the North American Datum (NAD\_1983), and an Average Nearest Neighbor Analysis was conducted using Euclidean Distance to assess spatial clustering (See Map 6).

To create the maps based on year, we selected by attribute (“IM\_1998”=1; Map 1), and created a layer from the selection for each year (“IM\_2004”=1; Map 2, “IM\_2010”=1; Map 3, “IM\_2016”=1; Map 4). We then reordered the selection years in the left hand panel to create Map 5, in which the colors of each selection by year of founding are visible.

"Another group central to coalescing information about IM in the U.S. is the Academic Consortium for Integrative Medicine and Health, a group of IM Centers from North America. To become a member, each member organization must have a significant program in education, research, or clinical integrative medicine and must have at least two of the three stated categories."

## Results

The results of this geographic analysis reveal steady geographic proliferation of IM centers throughout the continental United States between 1998 and 2016. Sixty-seven centers were evaluated, and founding dates were identified for 58 of 67 centers (87%). All of the IM centers evaluated either provided acupuncture as a clinical service, or taught about acupuncture, depending on the focus of the center. In 1998, 17 centers had been founded, representing 29% of the total that had been founded by 2016 (see Map 1). By 2004, 38 centers had been founded, representing 66% of the centers founded by 2016 and a 224% growth rate over 1998

(see Map 2). In 2010, 52 centers had been founded, representing 90% of those founded by 2016, and a 137% growth rate over 2004 (see Map 3).

By 2016, 58 were founded, representing 100% of those evaluated by time, and a 112% growth rate over 2010 (see Map 4). Altogether, of the 58 centers evaluated, there was 341% growth from 1998-2016 (see Map 5). Finally, results of the average nearest neighbor analysis revealed a z score of -6.83, and p value of 0.00, indicating that all 67 centers are highly clustered.

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**Map 1:** In 1998, 17 Integrative Medicine Centers existed, representing 29% of the total in existence in 2016.



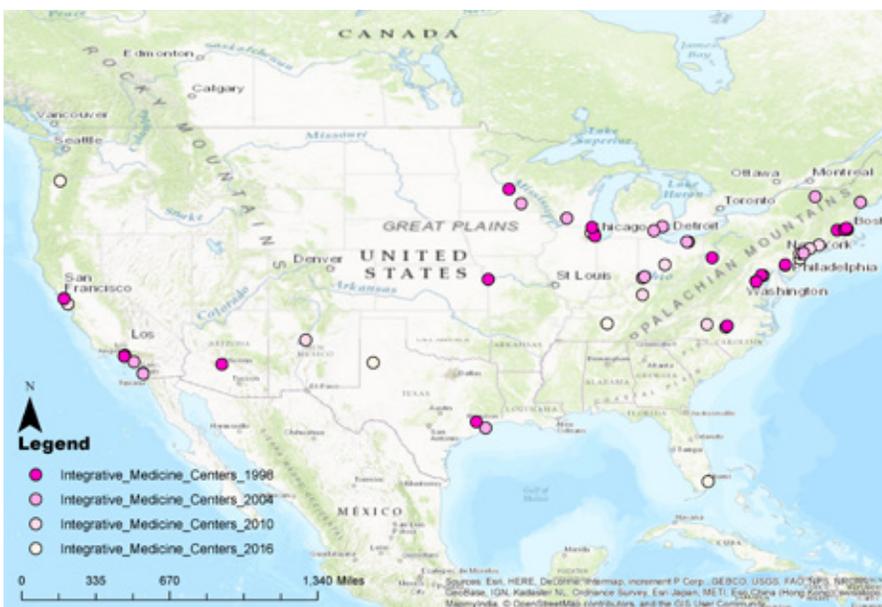
**Map 2:** In 2004, 38 Integrative Medicine Centers existed, representing 66% of the total in existence in 2016, and a 224% growth rate over 1998.



**Map 3:** In 2010, 52 Integrative Medicine Centers existed, representing 90% of the total in existence in 2016, and a 137% growth rate over 2004.



**Map 4:** In 2016, 58 Integrative Medicine Centers existed, representing 100% of the total in existence in 2016, and a 112% growth rate over 2010.



**Map 5.** Proliferation of Integrative Medicine Centers throughout the United States from 1998-2016. Of 58 centers evaluated, there was 341% growth from 1998-2016.



**Map 6:** In 2016, 67 Integrative Medicine Centers existed in total, though founding dates were only identified for 58. All 67 were analyzed for clustering using Average Nearest Neighbor Analysis.

## Discussion

Although there is a lack of definitive knowledge on the extent of integrative medicine centers in the U.S., and very limited spatial analysis of integrative medicine proliferation and new sites, the current study provides an important step in building a knowledge base on this issue. From this sample, there were 341% more academic integrative medicine (IM) centers in the continental U.S. in 2016 than in 1998 (Maps 1-5). These results suggest that IM may be proliferating, particularly in academic medical centers and hospitals from which this sample was drawn. The results of the average nearest neighbor analysis ( $z=-6.83$ ,  $p=0.00$ ) also indicates that these sites are highly clustered (Map 6; Figure 1).

There has long been anecdotal evidence of geographic distribution of IM centers on the east and west coasts of the United States. However, the average nearest neighbor analysis provides the first statistical evidence that IM centers are not geographically randomly distributed but located quite close to one another in specific regions of the country.

The IM centers evaluated here are indicative of regional trends in integrative medicine, specifically in academic medical centers and large hospital networks that focus on teaching and research. The geographic proliferation noted here is consistent with the exponential growth observed in peer-reviewed acupuncture research publications during a similar time period.<sup>13</sup> Taken together, the results shown here suggest that acupuncture research has grown with the expansion of IM centers in the United States.

An important consideration in the interpretation of these results is the exclusion of VA Centers and military medicine facilities, many of which are located in the southern U.S. As can be visually noted in Maps 1-6, there are very few IM facilities outside the VA located in the southeastern part of the country. While the VA does serve only a distinct population, VA hospitals represent an important part of the IM landscape and should be included in further geographic analyses.

Another limitation of this work is that the centers evaluated here represent a very select sample of IM centers present in the U.S. These were chosen because of their membership in professional networks, but there are an indeterminate number of other facilities throughout the country. Work in this area must address the difficulty in determining an operational definition of IM centers, and must continue to establish a widely accepted definition of what qualifies as a center.

“There has long been anecdotal evidence of geographic distribution of IM centers on the east and west coasts of the United States. However, the average nearest neighbor analysis provides the first statistical evidence that IM centers are not geographically randomly distributed but located quite close to one another in specific regions of the country.”

This study is further limited by only investigating centers within the bounds of the continental U.S. and represents a very preliminary analysis of the issues facing the field of IM. Further, data is missing for founding dates for 13% of the sites evaluated. In addition, most of the dates are sourced from websites and are possibly unreliable.

## Conclusions

Future directions for geographic analysis in the area of IM include exploratory analyses. Researchers may consider if IM centers are located in geographic areas with higher rates of chronic disease and if those areas have lower or higher opioid prescription rates than surrounding areas. Research may also investigate if we can predict where the next centers will be located, what populations IM centers are serving, and if those centers could they be located in more accessible locations.

Further work may expand the definition of IM to include smaller clinics, may look at geographic patterns of all CAM providers, and could re-examine what “access to care” looks like in medically underserved communities. This may help to answer whether or not there is easier accessibility to CAM or IM providers than conventional or western providers.

Finally, these findings have particular relevance to the professional acupuncture community, and specifically to acupuncture research. Future studies may look further at trends in published acupuncture research, affiliation of authors with professionally associated IM centers, and researchers working outside of IM centers. The clustering of IM centers in specific regions of the U.S. suggests that there are regions that are not equally benefiting from the clinical, research, and educational resources that IM centers provide, indicating an opportunity for future growth of IM centers.

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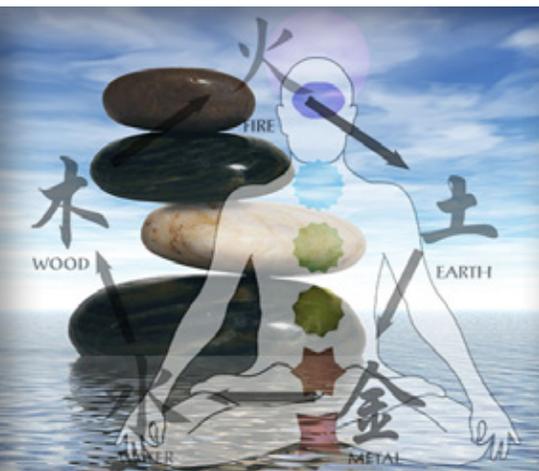
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# Integrating the Zang Fu Organs of Traditional Chinese Medicine with the Chakras of Pranic Healing

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Please see bios at end of the article.

## Abstract

This article suggests the introduction of the biofield therapy known as “Master Choa Kok Sui Pranic Healing” be incorporated into the modern acupuncturist’s repertoire of healing methods. The authors correlate the *zang fu* organs of traditional Chinese medicine with the eleven-chakra energy map of Pranic Healing. Incorporating both maps of the human body into our treatments can allow practitioners a better opportunity for successful healing to take place by offering more comprehensive treatments.

**Key Words:** acupuncture, pranic healing, chakras, biofield, bioenergy, Ayurveda, yoga, qigong

## Introduction

The system known as “Pranic Healing” is a style of medical *qigong* that was founded by Master Choa Kok Sui in 1987. Master Choa Kok Sui is a Chinese-Filipino teacher whose system is based on both philosophies of medical *qigong* and the chakra system of Ayurveda and yoga. Because Pranic Healing already synthesizes the ideas of chakras and acupuncture points, this is the antecedent to further research on how the chakra energy system can be treated with acupuncture and how to use the chakras to treat disorders of the *zang fu* organs.

Chakras are energetic nodes where prana flows in and out of the body. The term “chakra” is Sanskrit, translated as “wheel.” Each chakra governs different organs in addition to having various psychological and spiritual attributes.<sup>1</sup> There are many chakra systems throughout the multitude of Vedic traditions; the eleven-chakra model and its correlation to the organs was developed by Master Choa Kok Sui.

Prana may be described as vital energy which animates the body and activates the mind.<sup>2</sup> *Qi*, in the context of traditional Chinese medicine, is vital energy which maintains the human body’s vital and functional activities.<sup>3</sup> The terms prana, pranic energy, and *qi* may be used interchangeably.<sup>1,4,5</sup>

The *zang fu* comprise the organ system of traditional Chinese medicine (TCM). *Zang* are solid *yin* organs, while *fu* are hollow *yang* organs. The six *zang* organs are the Heart, Pericardium, Spleen, Lung, Liver, and Kidneys. The six *fu* organs are the Urinary Bladder, Gallbladder, Stomach, Small Intestine, Large Intestine and the San Jiao (Triple Burner). Practitioners of traditional Chinese medicine utilize the *zang fu* organs akin to pranic healers' utilization of the chakras. Both chakras and *zang fu* address physical, psychological, and spiritual disharmonies in a patient. Each *zang fu* has its own meridian that carries *qi*, Blood, and nutrients throughout the body.<sup>3</sup> Acupuncture points are nodes of energy along a meridian where practitioners gain access to the flow of *qi* in a patient's body.<sup>6</sup> By regulating the chakras and flow of pranic energy in a patient's body, practitioners of Pranic Healing facilitate the healing process similarly to how an acupuncturist regulates *qi* via the acupuncture points.

## Background

According to The Huffington Post, yoga is a 27-billion-dollar industry.<sup>7</sup> In 2015, over 21 million people practiced yoga for the first time in the United States.<sup>8</sup> Because of the popularity of the chakras and yogic philosophy, it is important to also understand how traditional Chinese medicine can treat the chakras by using acupuncture, *tuina*, and herbal formulas. Conversely, Pranic Healing can treat TCM syndromes by regulating the chakras. Traditional Chinese medicine and yoga are two of the most common forms of CAM in the United States.<sup>9</sup>

Pranic Healing and traditional Chinese medicine complement one another, and understanding how they fit together will benefit patients and practitioners of both systems. Although the chakras and the acupuncture points have different methods for treating the cause of disease, there are similarities between the two systems. Many of the acupuncture points and chakras have the same approximate location.<sup>4,5,10</sup> Not only do they share location, but the functions which are ascribed to the acupuncture points as well as chakras are parallel.<sup>11</sup>

Furthermore, the similarities between the functions of the chakras and the *zang fu* organs are also incredibly similar. Chakras and *zang fu* are interconnected to the physical organs of the body. They both govern physiological, psychological, and spiritual aspects of the organ they are related to, but are not limited to the functions of their western biomedical counterparts.

In the United States, there are many forms of bioenergy healing modalities that utilize the chakra system. Pranic Healing, usui reiki, quantum-touch, healing touch, therapeutic touch, esoteric healing, Ayurveda, and yoga are all modalities which also employ the chakra system. Healing touch alone has over seventy thousand registered nurse practitioners.<sup>12</sup> If a person experiences

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complementary and alternative medicine (CAM) in the United States, it is likely that the person will have their chakras treated and become familiar with the ideas and terminology of the chakra paradigm.

## Ideological Basis of Pranic Healing

Pranic Healing works by treating the congestion, depletion, over-activation, and under-activation of the chakras.<sup>13</sup> If there is congestion or depletion, the patient will feel discomfort or pain in the corresponding organ or body part. This is what is called *qi* stagnation in traditional Chinese medicine.<sup>14</sup> By using your palms to draw in pranic energy or *qi* from the surroundings, one can direct the pranic energy to a patient. Sweeping the palms over the painful area to remove the diseased energy or *bing qi* (病气) is called "cleansing;" directing the pranic energy or vital *qi* to a deficient part of the body is called "energizing."

To assess the chakras, practitioners of Pranic Healing utilize a form of energetic palpation called "scanning." This technique is used as a diagnostic method to know when a chakra needs more emphasis on cleansing or energizing. Jim Oschman's definition for healing energy was "whether produced by mechanical devices or projected from the human body, is a particular frequency or set of frequencies that 'jump starts' the repair of one or more tissues."<sup>15</sup>

Pranic healers project different colored pranas (regarded as frequencies of energy) based on the idea that the physical body has the innate intelligence to heal itself. Projecting prana or *qi* into any part of the body only increases the body's healing potential.<sup>1</sup> This distinction is important because it is not the prana itself that has healing properties to it, but it is what the body does with the prana that brings about healing.

Pranic Healing teaches that the physical body follows the mold set by the energy body, also called the biofield. Its premise is that once an adjustment is made to the energy body, the physical body will follow and pain will subside. Cleansing is always performed before energizing to ensure pranic energy flows in or out of the chakras smoothly.

Table 1. The 11 Chakra model of Pranic Healing and Corresponding Acupuncture Points

Pranic Healing	Sanskrit	Chinese	TCM Acupuncture Point
1 Crown	<i>Sahasrara</i>	顶轮	百会 Bai Hui Du-20
2 Forehead	<i>Lalaata</i>	N/A	神庭 Shen Ting Du-24
3 Ajna	<i>Ajna</i>	眉心轮	印堂 Yin Tang HN-3
4 Throat	<i>Vishuddhi</i>	后轮	廉泉 Lian Quan Ren-23
5 Front Heart	<i>Anahata</i>	心轮	膻中 Dan Zhong Ren-17
Back Heart	<i>same</i>	N/A	神道 Shen Dao Du-11
6 Front Solar Plexus	<i>Manipura</i>	脐轮	鸠尾 Jiu Wei Ren-15
Back Solar Plexus	<i>same</i>	N/A	筋缩 Jin Suo Du-8
7 Spleen	<i>Prana</i>	N/A	服哀 Fu Ai Sp-16 (left side)
8 Navel	<i>Nabhi</i>	N/A	神阙 Shen Que Ren-8
9 Meng Mein	<i>Shangu Thirivarmam</i>	N/A	命门 Ming Men Du-4
10 Sex	<i>Swadhisthana</i>	生殖轮	曲骨 Qu Gu Ren-2
11 Basic	<i>Muladhara</i>	海底轮	长强 Chang Qiang Du-1

“Pranic Healing teaches that the physical body follows the mold set by the energy body, also called the biofield. Its premise is that once an adjustment is made to the energy body, the physical body will follow and pain will subside.”

## Corresponding Zang Fu Organs and Chakras

### Lung

When patients suffer from Lung ailments, it is the back-heart chakra that will become either congested or depleted. The Lung is energized primarily by the back-heart chakra.<sup>13</sup> In general, when a patient has an excess pattern such as Wind Heat invading the Lung, the chakras will become congested; if they have a deficiency pattern such as Lung *qi* deficiency, the chakras are depleted. Cleansing the back-heart chakra when a patient presents with Wind Heat symptoms will reduce the excess of the Lung, and energizing will strengthen the righteous *qi* of the body to further eliminate the external pathogens.

When scanning the chakral condition of various ailments, the chakras may be either congested or depleted, while being under-activated or over-activated at the same time.<sup>13</sup> If we use Wind Heat invading the Lung as a hypothetical example, the excess of Wind Heat could cause the chakra to become congested, while the overall deficiency of the Lung could cause the back-heart chakra to become under-activated.

However, due to the complex nature of our bodies and how disease manifests, this may not always be the case, especially when the emotions are taken into consideration. For this reason, Master Choa Kok Sui emphasized scanning before each treatment to ensure the chakras receive the proper techniques taught in Pranic Healing.

### Large Intestine

The Large Intestine is regulated by the solar plexus and navel chakras. These two chakras comprise the digestive system in Pranic Healing.<sup>13</sup> Since the solar plexus regulates the Large Intestine while the navel regulates the Small Intestine, these two chakras are usually treated in the same session.

Psychologically, the Large Intestine in TCM is supposed to help people “let go” of their old emotions or else they will become emotionally constipated.<sup>14</sup> Negative emotions such as anger and resentment are often found in the back solar plexus chakra. Cleaning and energizing the solar plexus chakras will help a patient let go of energies that are no longer beneficial to them emotionally, while physically stimulating peristalsis in the large intestine allowing defecation.

### Stomach

The Stomach is regulated by the solar plexus chakra, and partially the spleen chakra.<sup>13</sup> Pranic healing is more in line with the bio-medical view of the stomach being the main organ for digestion as opposed to the Spleen in TCM. One common symptom of anxiety is heartburn. In TCM we understand this as the Liver Invading the Stomach, since both organs are controlled by the solar plexus chakra (which is largely influenced by our emotions), cleaning and energizing the solar plexus chakra helps both excess states of the Liver as well as the deficiency of the Stomach, which will resolve the reverse flow of *qi* and the heartburn will subside.

## Spleen

The Spleen is regulated by the spleen chakra, and partially the solar plexus chakra.<sup>13</sup> In TCM the spleen is mainly an organ of digestion, and the main source of post-natal *qi*. In Pranic Healing, it is the spleen chakra which draws in air prana from the surroundings and disperses it throughout the rest of the body. The spleen chakras are located on the left side of the body in the front (Sp-16) and back (Ub-49).

Dabao Sp-21, the great *luo*-connecting point of the Spleen is situated between the front and back spleen chakras. This connecting point disperses *qi* throughout the body, which is brought in from the spleen chakras in the front and back. With patients who suffer from Spleen *qi* deficiency with the symptom of overall weakness, gently cleaning and energizing the front and back spleen chakras will reinforce the spleen as well as distribute *qi* to the whole body.

## Heart

The heart is regulated by the front and back heart chakras.<sup>13</sup> When there is excess or congestion in the front heart chakra, it must be cleansed to remove the excess. When the Heart suffers from deficiency, it is energized through the back-heart chakra. This is comparable to TCM when we clear excess away from the front *mu* points, but reinforce deficiency through the back-*shu* points.<sup>14</sup>

In TCM theory it is explained that negative emotions affect the Heart before they move to the organs that relate to different negative emotions because it is the Heart that houses the mind. With the example of anger, it would first damage the Heart and then settle in the Liver.<sup>14</sup> In Pranic Healing, the relationship between the Heart and solar plexus chakras describes a similar association.

Positive emotions from the heart chakra will help clear away the negative emotions in the solar plexus chakra, but negative emotions in the solar plexus chakras will also congest the heart chakra. Thus, all negative emotions impact the heart. In TCM, Nei Guan Pc-6 is a common point used for anxiety and irritability. The Pericardium channel affects the front heart chakra. Irritability is also a sign of Liver *qi* stagnation which affects the solar plexus chakra.

When needling and using reducing method on Pc-6, it clears the congestion in the front heart chakra as well as clears stagnation in the Liver and solar plexus chakras. This is one of the reasons this point is often used for nausea and vomiting.

## Small Intestine

The Small Intestine is regulated by the navel chakra, and partially from the solar plexus chakra.<sup>13</sup> If someone suffers from diarrhea or constipation, the solar plexus and navel chakras must be treated since it is a problem that affects both the Large and Small intestines. The navel chakra is located at Shen Que Ren-8. The front *mu*

point of the Large Intestine is Tian Shu St-25, located 2 *cun* lateral to the navel chakra. Cleaning and energizing the navel chakra will also reduce excess from St-25 (and the Large and Small Intestine) in patients with the TCM pattern of “food stagnation.”

TCM describes the small intestine to be able to separate the pure from the impure.<sup>16</sup> This is part of the “gut feeling” people describe when they can sense something is not right or what is “impure.” The navel chakra is the center of instinctual knowing.<sup>1</sup>

## Bladder

The Bladder is regulated by the sex chakra. It is the sex chakra and the meng mein chakra together that makes up the urinary system.<sup>1</sup> It is interesting that the Bladder meridian runs over the kidneys, and the Kidney meridian runs directly over the Bladder. Although the Bladder in TCM is relatively of little importance compared to the other *zang fu*, the sex chakra is of much more importance in Pranic Healing. It is the sex chakra which governs not only the bladder, but the reproductive organs and urinary system.

Reproductive health in men and women, women’s menstrual disorders, even creativity rely on the health of the sex chakra. The role of the sex chakra in Pranic Healing is the culmination of the Liver, Kidney, and Bladder in TCM with regards to reproductive health.

## Kidney

It is the meng mein chakra that regulates the Kidneys.<sup>1</sup> When Master Choa Kok Sui wrote *Miracles Through Pranic Healing* in 1988 he used the Wade-Giles Romanization system, instead of the now more common pinyin system. Meng mein is the same characters of *ming men* 命门 Du-4, which means “life gate.” The meng mein chakra is what “pumps” the energy up from the basic chakra to the rest of the body.

It is the basic chakra at the base of the spine which supplies the physical body with ground prana. Since ground prana is used to energize the physical tissues of the body, it is important for the meng mein chakra to be able to spread this pranic energy throughout the body.

In Kidney Essence deficiency, both the meng mein and basic chakras are depleted. This manifests as slow development in children or early aging for adults. There is a technique in advanced Pranic Healing called “master healing technique,” where the meng mein and basic chakras are energized for patients who suffer from overall weakness.<sup>13</sup> This technique theoretically could benefit patients with Kidney Essence deficiency.

## Pericardium

The Pericardium is regulated by the front-heart chakra. Because the Pericardium is the protector of the Heart, it rarely has

disorders of deficiency, but usually of excess. In Pranic Healing a practitioner never energizes the front heart chakra but will often sweep or clean the chakra when it is congested with excess devitalized pranic energy.

In the four-level diagnosis of "Heat in the Pericardium," a patient suffers from symptoms of mental confusion, incoherent speech, and high fever at night. In Pranic Healing the treatment to help this pattern would be to apply general sweeping of the entire aura to clear the excess heat, but also cleaning the congestion from the front heart chakra. Cleaning the front heart chakra and energizing the back-heart chakra will bring more peace and mental clarity to the patient.<sup>1</sup>

**San Jiao**

In relation to Pranic Healing, the *san jiao*, or Triple Burner, divides the various chakras into their respective *jiao*. For example, disorders of the upper *jiao* will affect the chakras associated with the upper *jiao*, so all of them would need to be treated if a patient suffers from heat in the upper *jiao*.

Table 2.

Burners	Chakras	Zang Fu Organs
Upper Burner	Front and Back Heart Chakras, Throat, Ajna, Forehead, and Crown Chakras	Heart, Lung, and Pericardium
Middle Burner	Front and back Solar Plexus Chakras, Front and Back Spleen Chakra	Stomach, Spleen, Gallbladder, and Liver (physical location)
Lower Burner	Navel, Meng Mein, Sex, and Basic Chakras	Liver (energetic location), Kidneys, Urinary Bladder, Large and Small Intestines



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## Gallbladder

The Gallbladder is regulated by the solar plexus chakra.<sup>13</sup> The *shen* or spirit of the Gallbladder in TCM is described as allowing a person to make clear decisions. If the solar plexus chakra is congested, the energy throughout the whole body will not flow properly, which will cause a person to not only feel agitated (Liver *qi* stagnation) but will also cause the mind to become unclear. Because the Gallbladder is internally-externally paired with the Liver, it shares much of the Liver's function to free-flow *qi* in the body.

We need gall from the Gallbladder—energy and fortitude to push forward in life. This courage is also part of the emotional aspect of the solar plexus chakra. By cleaning and energizing the solar plexus chakra, the Gallbladder will also be reinforced, instilling courage in the patient.

## Liver

The Liver's most important job in TCM is the free-coursing of *qi* in the body.<sup>14</sup> It is the same for Pranic Healing in terms of the solar plexus chakra which regulates the Liver. The solar plexus chakra acts as the clearing center of the chakra system.<sup>1</sup> When a patient suffers from any Liver disharmonies, the solar plexus chakra is affected. Some disorders, such as Liver Invading the Spleen, can be relieved by cleaning and energizing the solar plexus chakra which governs both the Liver and the Spleen.

Anger is the emotion that negatively affects the Liver. Master Choa Kok Sui explains that when a person is angry, the solar plexus chakra fills with "dirty" pranic energy, which will cause a person to also feel very hot, just as *qi* stagnation may turn into Fire.<sup>16</sup> Depending on how much of this dirty, hot prana is in the solar plexus will determine if someone merely has slight agitation from Liver *qi* stagnation or rage and Liver Fire Blazing Upwards. Cleaning and energizing the solar plexus chakra will help resolve both TCM patterns.

"The definition of biofield therapies are 'a family of healthcare practices that involve either, or both, hands-on and hands-off treatment.' "

## Discussion

Both traditional Chinese medicine and Pranic Healing use energetic maps to describe the landscape of the human body. Just as one map can show the natural geography of a country and another can show state lines and freeways, neither map will fully encompass all that there is within the terrain. This is the same with the meridian and *zang fu* system of traditional Chinese medicine and the chakra system of Pranic Healing.

Incorporating both maps of the human body will allow practitioners and patients alike a better opportunity for successful healing to take place. A synthesis of understanding both paradigms can be clinically useful.<sup>11</sup>

Modern research refers to the energy body as the biofield.<sup>17</sup> While some aspects of the biofield which are made of up bioelectrical and biomagnetic fields can be measured by instruments such as the electrocardiogram or electroencephalogram, other subtle energies cannot be objectively measured but are theorized to still exist due to various anomalies that are reproducible.<sup>18,19</sup>

In addition to Pranic Healing, there are many styles of bioenergy healing, such as healing touch, reiki, and *qigong*, that are categorized as biofield therapies by the NCCIH.<sup>8</sup> The definition of biofield therapies are "a family of healthcare practices that involve either, or both, hands-on and hands-off treatment."<sup>20</sup>

Pranic Healing is a hands-off biofield modality where practitioners regulate the chakras and flow of prana at a distance without physically touching a patient. Bioenergy in the context of the human biofield may be defined as "a force associated with a biological system which can cause action at a distance."<sup>21</sup>

Many biofield therapies are hard to research because of inconsistencies in length and frequency of treatment. There is considerable heterogeneity among research designs. The length of a treatment and how many treatments to be included in the trials reveal very little consensus regarding dosage.<sup>20</sup>

Pranic Healing gives a step-by-step protocol that is easy to follow and replicate, while also advising how frequently the treatments should be repeated over time to ensure a good result. Because of how clearly the protocols are written, it is easier to design a clinical trial based on these protocols when compared to a therapy which does not have any type of protocol for various diseases.<sup>22</sup>



“Incorporating both maps of the human body will allow practitioners and patients alike a better opportunity for successful healing to take place. A synthesis of understanding both paradigms can be clinically useful.”

Despite difficulties encountered in researching biofield therapies, the evidence for non-touch therapies are promising.<sup>23</sup> Currently, the trend of alternative medicine is moving into integrative medicine. Biofield therapies have shown to benefit a large range of biomedical disorders, such as cancer pain and quality of life,<sup>24, 25, 26, 27</sup> spinal cord injuries,<sup>28</sup> orthopedic pain,<sup>29</sup> and heart disease.<sup>30</sup> Not only have biofield therapies shown to be beneficial for recipients of the therapies but have shown to be beneficial for the practitioner as well.<sup>31</sup>

TCM is “evidence-informed practice.” With more research showing the efficacy of biofield therapies and Pranic Healing specifically,<sup>32, 33</sup> it should be considered as an adjunct treatment with acupuncture, *tuina*, and herbal formulas of TCM.

Although there are differences in theoretical ideas, they do not appear to conflict with one another in practice as the two systems work on different energetic levels of the same body.<sup>34, 35</sup> Just as you would need two maps to fully understand and navigate your location, we can likely conclude that by using traditional Chinese medicine and Pranic Healing simultaneously, a practitioner may thus navigate through complex disorders with a more comprehensive and effective treatment plan for their patients.

### Acknowledgements

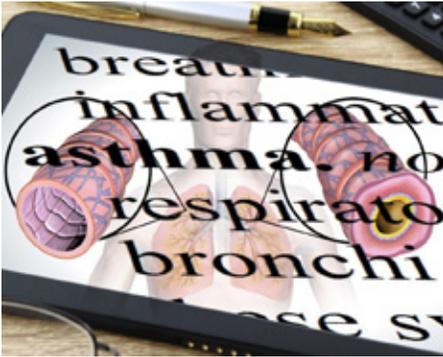
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## CLINICAL PEARLS



The topic discussed in this issue is:

### How Do You Treat Asthma in Your Clinic?

Asthma is a condition in which a person's airways narrow, swell, and produce extra mucus. This can make breathing difficult and trigger coughing, chest tightness, wheezing and shortness of breath. As the muscles around the airways tighten, this causes less air to flow into the lungs. The swelling also can worsen, making the airways narrower. Cells in the airways might make more mucus than usual. This chain reaction can result in asthma symptoms, which can range from minor to life threatening.

Asthma affects people of all ages but it most often starts during childhood. In the United States, more than 25 million people, including six million children, are known to have asthma. Young children who often wheeze and have respiratory infections are at highest risk of developing asthma that continues beyond six years of age. Risk factors include having allergies, eczema, or parents who have asthma.

“Researchers believe that our western lifestyle—with its emphasis on hygiene and sanitation—has resulted in changes in our living conditions and an overall decline in infections in early childhood.”

Although some asthma symptoms are mild and go away on their own or after minimal treatment with asthma medicine, symptoms can continue to get worse. Because asthma often changes over time, its symptoms can be controlled, and it's important that the patient and doctor track signs and symptoms and adjust treatment as needed.

The exact cause of asthma isn't known. Researchers think some genetic and environmental factors interact to cause asthma, most often early in life. These factors include: an inherited tendency to develop allergies, (known as “atopy”); parents who have asthma; certain respiratory infections during childhood; contact with some airborne allergens or exposure to some viral infections in infancy or in early childhood when the immune system is developing.

One theory for what causes asthma is the “hygiene hypothesis.” Researchers believe that our western lifestyle—with its emphasis on hygiene and sanitation—has resulted in changes in our living conditions and an overall decline in infections in early childhood.

Asthma is treated with either long-term control or quick-relief medicines. Long-term control medicines help reduce airway inflammation and prevent asthma symptoms. Quick-relief, or “rescue,” medicines relieve asthma symptoms that may flare up.

Patients can work with their doctor to create a personal asthma action plan. This will describe their daily treatments, such as which medicines to take and when to take them, and will also indicate when it becomes necessary to call their doctor or go to the emergency room.

In Chinese medicine, asthma is called “*xiao chuan*,” which means wheezing and dyspnea, respectively. Chinese medicine classifies *xiao* and *chuan* as two separate illnesses with different treatments. *Xiao* (wheezing) is characterized by a whistling sound during breathing, increased respiration rate, dyspnea and inability to rest in a horizontal position. *Chuan* (shortness of breath) is characterized by dyspnea, constant opening of mouth to grasp air, raised shoulder, flared nostrils and inability to rest in a horizontal position. Patients with *xiao* (wheezing) generally will have *chuan* (shortness of breath), while patients with *chuan* (shortness of breath) may or may not have *xiao* (wheezing).

According to eastern medicine, there are many factors that may trigger an asthma attack. While the fundamental cause of asthma is the storage of phlegm in the Lung, other examples include the invasion of the external pathogenic factors, diet, emotional disturbances, congenital weakness and chronic illnesses.

The passage of water is controlled by three organs, namely Lung, Spleen and Kidney. Lung regulates the water passages in the upper *jiao*, the Spleen transports and transforms water in the middle *jiao*, and Kidney dominates water metabolism in the lower *jiao*. Imbalance of *yin* and *yang* in any of these three organs may lead to stagnation of the water circulation, which then contributes to the production and storage of phlegm in the Lung.

In addition to the phlegm, chronic asthma will lead to vacuity of Lung, Spleen, and Kidney. Deficiency of the Lung creates an inability of the Lung to inhale the air, and deficiency of the Kidney creates an inability of the Kidney to receive or grasp air. This will be complicated further if the Spleen is also deficient and cannot transform and transport fluids and there is an excess amount of phlegm that obstruct the airway. Overall, the condition becomes more and more complicated as the underlying syndrome represents a “vacuous” condition and the symptoms an “excess” condition.

External pathogenic factors, such as cold or heat, rapid weather change, and also pollen, cigarette smoke, and any other allergens, commonly induce asthma attacks. As the environment affects the skin and Lungs govern the skin, the change is reflected in this “delicate” organ. The Lung function to regulate water passage becomes impaired when it is attacked and water begins to stagnate and phlegm forms.

Regarding diet and asthma, raw and cold food may injure the Spleen and tend to contribute to the stagnation of fluid circulation and the increase in the production of phlegm. Heavy, sweet,

“According to eastern medicine, there are many factors that may trigger an asthma attack. While the fundamental cause of asthma is the storage of phlegm in the Lung, other examples include the invasion of the external pathogenic factors, diet, emotional disturbances, congenital weakness and chronic illnesses.”

and greasy foods tend to create phlegm and heat in the body. Fish, crabs, shellfish and other seafood have also been noted to increase the likelihood of asthma attacks.

As noted, congenital weakness and chronic illness are also common causes of asthma. Children with asthma generally have congenital Kidney *qi* deficiency. On the other hand, chronic illness, such as patients with chronic cough and recurrent cold/flu, are likely to have Lung vacuity.

If a patient seeks eastern medical care and has a history of asthma, it is important to ascertain the seriousness of the asthma in their history as well as actively present. Always remind patients to carry their inhaler on them all the time, even if they are receiving treatment and improvements are made, as external factors can play into circumstances. It is better for patients to be safe than sorry if an unexpected flare-up occurs.

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## How Do You Treat Asthma in Your Clinic?

By Jason Bussell, PhD, LAc

Jason Bussell owns and operates A Center for Oriental Medicine in Wilmette, Illinois, with his wife, Jeanie. He earned a bachelor's degree with honors in psychology at Depaul University, where he is currently an adjunct professor in their College of Science and Health, and he is one of the first Americans to earn a PhD in Acupuncture at the prestigious Guangzhou University of Chinese Medicine. Jason is president emeritus of the Illinois Association of Acupuncture and Oriental Medicine as well as a past board member of the Illinois State Government Board of Acupuncture. He is the author of *The Asian Diet: Simple Secrets for Eating Right, Losing Weight, and Being Well*, published by Findhorn Press ([www.theasiandiet.com](http://www.theasiandiet.com)). Jason is now pursuing dual masters' degrees in both public health and business administration at Johns Hopkins University. He can be reached at [Jason@acfom.com](mailto:Jason@acfom.com)

In my practice, I often see asthma as either a Lung *qi*, Lung *yin*, or Kidney *qi* vacuity. For general purposes, I do a hybrid treatment, using a style organized by Richard Tan LAc called the "balance method" to address the Lung and the Kidney meridians together. One side (it doesn't matter which side) will be Lu-7 and UB-60; the other side will be SI-3 and Kd-3. As any acupuncturist knows, each one of the body's organs and corresponding

"I recommend all of my asthma patients to get an air purifier and keep it in their bedroom (which is generally the room in which they spend the most time)."

channel or meridian is connected to others via a complex network of inter-relationships. Richard Tan's method aims to use meridian associations in the historical context of Chinese medicine and utilize

them to identify problem channels/organs and "balance" them via acupuncture meridian pairs to keep the body in optimum health.

The Urinary Bladder and Kidney meridians balance each other via their *yin* and *yang* associations with the Water phase. Small Intestine and Urinary Bladder meridians balance each other in their *tai yang* relationship. They also both balance the Lung meridian via *tai yin* – *tai yang* pairing. The point combination that would most closely align with Tan's style is to use the Spleen channel rather than the Kidney meridian, and this will work as well. I just find better results using Kidney.

These points can be combined with other points to address other issues as well. For acute conditions, I will add Lung-1 (the alarm point for the Lung), Ren-17 (to relax and open the chest) and St-36 (for its down-bearing function) bilaterally, and *yin tang* (to calm the patient). Sometimes I will add Kd-1 to have the strongest down-bearing effect if nothing else is working.

Needles are retained for 30-40 minutes with no additional manipulation. I recommend treatment twice a week for two to four weeks, then taper to once a week, every two weeks, every four weeks, and then once every two to three months as maintenance with additional treatments as needed. With this protocol, we often see patients reduce their frequency of asthma attacks and thus their need for medication.

It is also important to try to identify and reduce exposure to triggers. I recommend all of my asthma patients to get an air purifier and keep it in their bedroom (which is generally the room in which they spend the most time). Keeping a food and asthma log for a week can sometimes help identify foods that exacerbate the condition. Breathing exercises can help increase lung capacity; I recommend tai chi for everyone regardless of their presenting complaint.

## How Do You Treat Asthma in Your Clinic?

By Dylan Jawahir, LMT, LAc

Dylan Jawahir, LMT, LAc, DiplOM (NCCAOM) focuses on injury, rehabilitation, and pain management at his San Diego clinic, August Point Wellness, LLC. He has practiced acupuncture for 5 years and massage therapy for eleven. Dylan is also the CEO of Battle Balm, a brand focused on bridging the gap between TCM and mainstream OTC medicinals by manufacturing premium quality herbal topicals and supplements for the discerning, health-conscious consumer. He may be reached at [dylan@augustpoint.com](mailto:dylan@augustpoint.com) or [dylan@battlebalm.com](mailto:dylan@battlebalm.com).

Asthma is a respiratory condition marked by spasms in the bronchi of the lungs, causing difficulty in breathing. Traditional Chinese medicine (TCM) has quite a bit of success in treating cases of asthma. In TCM, the asthma symptoms are used to differentiate which type of asthma a practitioner is dealing with. The four types of asthma are: *chuan zheng* (panting), *chaun ke* (panting with coughing), *xiao zheng* (wheezing), *xiao chuan zheng* (wheezing with coughing). Each type has a TCM diagnosis and treatment protocol associated with it. This particular short piece will focus on asthma due to a Spleen vacuity.

“My patient, suffering from Spleen vacuity asthma, received five treatments... Along with the dietary modifications, this not only improved my patient’s asthma but also cleared up some lower leg eczema that had been plaguing him for the past year.”

Acupuncture and herbal formulas can help with Spleen *qi* deficient asthma. The signs and symptoms of Spleen *qi* vacuity are shortness of breath, fatigue and dyspnea combined with loose stools, post-prandial abdominal distention, and possibly edema. The tongue is often puffy and pale with teeth marks. The pulse is often slippery and soft. My treatment usually includes a dietary analysis and suggestions to remove greasy, rich foods and include easily digestible, bland foods to supplement Spleen and remove possible Dampness in the middle *jiao*.

My patient, suffering from Spleen vacuity asthma, received five treatments along with *Liu Jun Zi Tang* (Six Gentleman Decoction) and *Yu Ping Feng San* (Jade Windscreen Decoction). Along with the dietary modifications, this not only improved my patient’s asthma but also cleared up some lower leg eczema that had been plaguing him for the past year. He was still doing well one year after treatment with no asthma attacks during that period.

Acupuncture Points:

Ear Point Zero - Nogier’s point to stimulate parasympathic nervous system

Master Tung’s 4 Horses: Si Ma Zhong, Si Ma Shang, Si Ma Xia—powerful points to treat asthma<sup>1</sup>

DU-14 – regulates *wei qi* and releases the exterior

ST-36 – fortifies the Spleen

REN-6 – regulates and tonifies *qi*

Dingchuan – calms asthma and cough, dispels Wind

Standard Herbal Formula: *Liu Jun Zi Tang* + *Yu Ping Feng San*.<sup>2</sup> This formula supplements Spleen and Lung while transforming Damp.

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## How Do You Treat Asthma in Your Clinic?

By Anna Palucci Young, LAc

Anna Palucci Young, LAc has been practicing acupuncture and Chinese herbology for over 10 years. She has also been an instructor and clinical supervisor at Pacific College of Oriental Medicine in Chicago since 2011. Anna is currently studying advanced pulse diagnosis with Martha Lucas, LAc in an intensive, year-long program and has received training with Marie France Collin, LAc in the use of extraordinary channels. She can be reached at [acupuncture.gurl@gmail.com](mailto:acupuncture.gurl@gmail.com)

I have had great success treating asthma with Chinese medicine. In most cases, if patients complete the advised treatment plan and follow the lifestyle recommendations, they are able to stop or significantly reduce their need for daily medications. Asthma attacks are generally precipitated by an emotional event. A pattern I see very often in clinic is Liver *qi* stagnation invading the Lungs. Patients who are strongly affected by stress, anger, frustration and repressed emotions are often susceptible to this pattern leading to chest tightness, wheezing and shortness of breath.

If Liver *qi* is stagnant, it can rebel and insult the Lungs in the five element system. This leads to an excess or blockage of *qi*, which prevents the proper descent of Lung *qi*, negatively affecting the *qi* mechanism. It is also important to remember that the Liver channel ascends through the chest and that the organ is directly beneath the diaphragm. This results in a very common symptom of the patient having difficulty taking a deep and satisfying in-breath. This symptom is usually the one that patients notice dissipates immediately after needles are inserted.

In order to ensure this immediate relief during the treatment, it is important to assess possible obstructions of *qi* in the body. One way is to open the extraordinary vessel meridian *Dai Mai* which can assist in rectifying the *qi* mechanism.

I start with reducing SJ-5 and GB-41 I will then consider points such as GB-26 or 27. Sometimes, simply palpating along the area of the *Dai Mai* meridian and inserting needles into taught, reactive areas will do the trick. Once I have opened the *Dai Mai*, I may then use points such as GB-21, Lu-1, Kd-27 and Ren-17 to open up the chest and down bear Lung *qi*. You may also want to try Lu-1 with Lv-14.

An important concept here for successful treatment in this example is the importance of treating stagnation in the three *jiaos* and understanding how the *Dai Mai* is the link between the upper and lower *jiaos*.

If there are other excesses such as Heat, try points such as Lu-5, St-25, St-32 and St-44 to drain Heat out through the bowels. If Kidney vacuity is also present with heat, consider points such as Kd-1, Ren-17 and Lu-5 to bring that excess Heat down to the lower *jiao* to tonify the Kidneys.

If Phlegm is present, consider adding points such as Pc-5, St-40 and Ren-17.

Finally, getting to the root cause of this type of pattern requires the patient to become aware of how stress and pent up emotions affect his or her body. Acupuncture treatments help them to feel what it is like to be free of *qi* stagnation, at least temporarily. The end goal is for the patient to begin to make important mind-body connections using breathing techniques, *qi gong*, psychotherapy or another method. Along with following treatment guidelines, these self-care techniques are key to keeping their *qi* and breath flowing smoothly, thus keeping the patient feeling calm and stress-free.

“...these self-care techniques are key to keeping their *qi* and breath flowing smoothly, thus keeping the patient feeling calm and stress-free.”

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## SI-1 少澤 *Shao Ze/Lesser/Internal Marshland*

By Maimon Yair, DOM, PhD, Ac and Chmielnicki Bartosz, MD

*Please see bios at end of the article.*

SI-1 is a *jing-well* and Metal point; both aspects are shown in the picture. The well is illustrated and heap of coins represents the Metal aspect.

The Metal quality enables this point to concentrate very rich, nourishing energy flowing from the Hand *shaoyin* Heart channel. The *shaoyin* is shown as a light shining from the inside of the well. This constricting movement results in creation of Essences which are then sent to the Upper *jiao*. Therefore, SI-1 is famous as a point strongly promoting lactation. This action is portrayed as a woman breastfeeding her child.

The evaporating marshland is further explained in the points name 少澤 *shao ze* Lesser/Internal Marshland.

\*This picture is part of a project called the "Gates of life," portraying the nature, action\* and *qi* transformation of acupuncture channels and points made by the CAM team (Ayal, Chmielnicki , Maimon).

### Characters of the Name:

少 – *Shao* Something small (*xiao* 小) divided into even smaller parts – little, few, lesser. Also internal, delicate

澤 – *Ze* Water confined to produce fermentation – marsh, damp, to fertilize, to enrich

## Meaning of the Name:

### Internal (created from the Inside) Marshland:

Although not a literal translation, this interpretation focuses on the flow of *qi* and Blood, nourished by the Spleen and animated by *shen* from the *shaoyin* Heart channel—the most internal channel in the body. This can be understood through the diurnal channel flow and energy production from the Spleen to the Heart and to then to the Small intestine.

### Lesser Marsh:

“Lesser” relates to the point location on the point at the end of the little finger, therefore a small, lesser marsh. “Marsh” conveys the essence of the nutrients which are brought from the previous channel, the *shaoyin* heart channel. Marshes are very fertile areas because they extract nutrients carried by the rivers. The Metal quality of this point further helps in concentrating these Essences. Therefore, this point is used to support production of milk and invigorate lactation.

## Other Names:

小吉 – *Xiao Ji* – Minor Happiness, Happiness of Small Intestine—the Small Intestine is the Yang of Fire—it rules over the expression of joy and intelligence through communication and openness. This point is indicated for disturbances in the organs of speech because it facilitates communication through clarity and openness to the external world.

## Location

*Shaoze* is located on the ulnar side of the small finger, near the corner of the nail.

## Action and Indication:

### *Jing-well* point

Being a *Jing-well* point, SI-1 is indicated in the treatment of the “fullness below the Heart.”

### Metal point

The Metal Phase is related to the autumn. The natural direction of the flow of *qi* during this season is downwards and inwards. People, being a part of nature, reflect this movement as they gather the food and move all of the goods into storage in order to survive the winter. They also extract the essences from the fruits when preparing jams, wines, or preserves.

“Marshes are very fertile areas because they extract nutrients carried by the rivers. The Metal quality of this point further helps in concentrating these Essences. Therefore, this point is used to support production of milk and invigorate lactation.”

The Metal quality enables SI-1 to concentrate refined energy and Blood animated with *shen* flowing from the Heart *shaoyin* channel.

Milk is a very distilled energy of Blood. SI-1, due to its Metal quality, strongly promotes the production of milk in breastfeeding women. The nipple is governed by the energy of the Liver. The Small Intestine is opposite to the Liver in the organ clock; therefore, SI-1 influences the free flow of milk in the nipple.

### Affecting the other end of the channel

The *jing-well* points are places where channels change their polarity from *yin* to *yang* and from *yang* to *yin*. This results in very dynamic flow creating a strong influence at the other end of the channel. In the case of SI-1, it also affects all of the orifices: eyes, ears, nose, and mouth. It treats conditions of the eyes (red eyes, visual problems), nose (nosebleed, ear-deafness, tinnitus), and tongue (stiffness, heat in the mouth, throat pain).

Therefore, this point is used to clear pathologies of Fire/Heat as well as to move stagnated fluids and Dampness away from the orifices.

### Affecting tendomuscular meridian

The tendino-muscular (TMM) channel starts from SI-1, therefore this point is used to treat various pains and swellings alongside the channel. The TMM channel flows through the wrist, forearm, elbow, and arm to the scapula and surrounding area. It then ascends through the neck, behind the ear, descends towards the mandible, and ascends again, passing the outer canthus and finally reaching the region of St-8.

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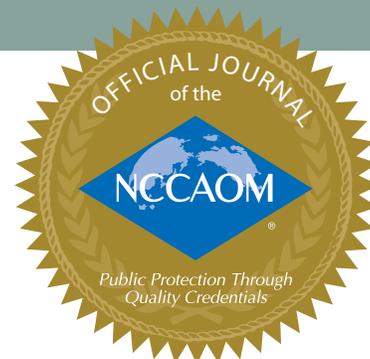
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