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The Journal of the American Society of Acupuncturists

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Report on the Society of Acupuncture Research International Conference

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Book Review: *Contemporary Oriental Medicine Concepts*

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



Welcome to the summer issue of JASA, *The Journal of The American Society of Acupuncturists!*

This year we've had a lot of activity surrounding the subject of acupuncture, particularly concerning the Centers for Medicaid and Medicare Services (CMS) and the U.S. Department of Health and Human Services (HHS). A lot of people have questions about what it all means.

CMS Chronic Low Back Pain Study

In my last letter I discussed the NIH review of applications and the efforts by teams of researchers who are competing for the historic NIH funded research study: *Pragmatic Randomized Controlled Trial of Acupuncture for Management of Chronic Low Back Pain in Older Adults*. The request for applications was issued by the National Center for Complementary and Integrative Health (NCCIH) and the National Institute of Aging (NIA). The application deadline was March 15th 2019.

The winning teams will get \$1.25 million to conduct the study. You can read the funding opportunity announcement here: <https://grants.nih.gov/grants/guide/rfa-files/RFA-AT-19-005.html>

This pragmatic (real life scenario) study required that acupuncture be imbedded into healthcare delivery systems in a real-world setting. To be eligible for the study, the research team had to involve at least two different health care systems. Not two different clinics, *two different whole healthcare systems*. To be more competitive, some teams are including 4-6 different healthcare systems in different regions of the country.

Though no decision has been made yet on which teams will win the funding and conduct the study, on July 15th 2019 a decision memo was posted by the CMS that provides more information on the study. In the first section, first line reads:

The Centers for Medicare & Medicaid Services (CMS) proposes to cover acupuncture under section 1862(a)(1)(E) of the Social Security Act (the Act), with the support of the Agency for Healthcare Research and Quality under section 1142 of the Act. We propose that coverage would be available for Medicare patients with chronic low back pain in clinical trials supported by the National Institutes of Health (NIH) or in CMS approved studies meeting AHRQ criteria.

Note: For more on this CMS press release, see: https://www.acupuncturetoday.com/digital/index.php?i=737&s=51674&l=14&a_id=33698&pn=68&r=t&Page=68

This indicates that for this CMS sponsored study on seniors with chronic low back pain, the CMS will pay for the all acupuncture treatments for each patient. All patients (subjects) enrolled in the study will get 12 acupuncture treatments. All acupuncture treatments will be provided by a physician acupuncturist or an LAc who graduated from an ACAOM accredited school and is NCCAOM certified.

For this study, all acupuncturists who will perform the acupuncture treatments must be under the direct supervision of a physician, physician assistant, or nurse practitioner/clinical nurse specialist. Here's why: these licensed professionals are all approved Medicare providers and have

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the authority to bill Medicare but acupuncturists do not. Although licensed, many acupuncturists will be part of these research teams but the licensed acupuncturists can't bill CMS for the service because they are not Medicare providers.

The CMS chronic low back pain study is large and highly competitive, so teams who have applied include multiple senior research scientists who have a track record of successful federally funded trials and experience on grant review committees. These are scientists and academics—deans, department chairs and directors at some of the top medical schools in the U.S.

The medical school or research institution appoints a scientist or faculty member as a Principal Investigator (PI) for their institution. The PI designs and leads the research project and assembles the team. The institution gets the money. The PI manages it.

Usually PIs are research scientists with an MS or PhD, and they're university faculty with a title, for example, "associate research professor" or something similar. MD and LAc clinicians are not usually PIs unless they have a specific interest in team building and research trial design.

If the study involves clinical research, the PI must work with a clinician to recruit patients/subjects for the study. If the study involves acupuncture, the PI must consult and work with an acupuncturist right from the beginning of the study design and provide the acupuncture intervention in the study.

When clinical acupuncturists tell me they are interested in doing research, I tell them to get connected to a large university, medical school or some kind of research institution. Clinical research is a group effort. Find people at the university who have the same research interests that you do and set up a meeting. They need you as much as you need them.

This issue presents a piece by Yan Chen, OTD, LAc. She assembled a team from the Won Institute that conducted a small feasibility study using the NADA points for test anxiety in students. It provides a good example of how a small study can be done in an acupuncture school without the enormous burden of applying for federal funding.

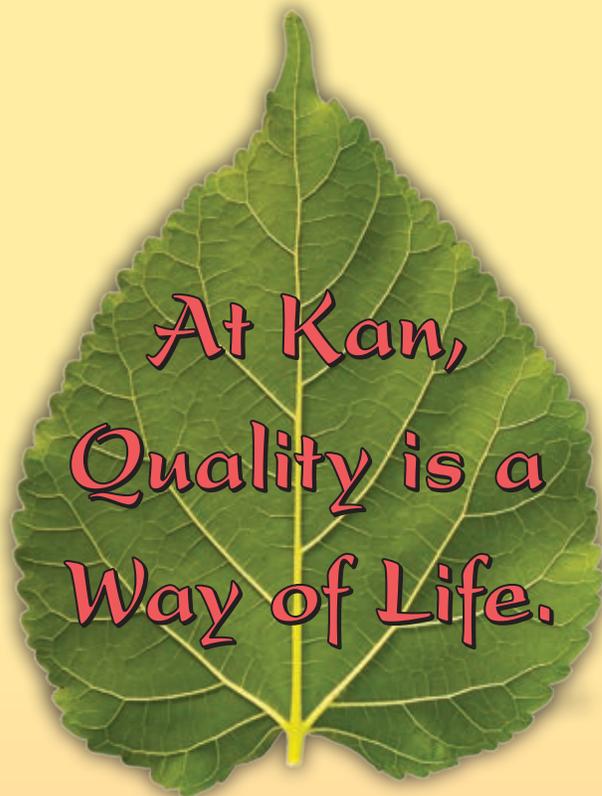
Additionally, we have included a paper prepared by a collaborative team of researchers and clinicians from The Center for Comprehensive Wellness at Columbia University Medical Center and New York-Presbyterian/Morgan Stanley Children's Hospital. Doing projects like these can provide experience so you can find out if you do want to pursue federally funded projects.

JASA is the only peer reviewed scientific acupuncture and Chinese medicine journal published in the U.S. The articles in JASA and other peer reviewed journals provide evidence that changes healthcare policy provide more access to acupuncture for the American people. As I said in JASA's spring issue, it's this kind of research and dissemination of results that puts our medicine in the limelight and instills respect by the general public—our potential patients.

If you want more information on this topic or how to become connected to an academic research team of a medical school, please contact me: meridiansjaom@gmail.com

Respectfully,
Jennifer A. M. Stone, MSOM, LAc
Editor in Chief, JASA

"JASA is the only peer reviewed scientific acupuncture and Chinese medicine journal published in the U.S. The articles in JASA and other peer reviewed journals provide evidence that changes healthcare policy provide more access to acupuncture for the American people."



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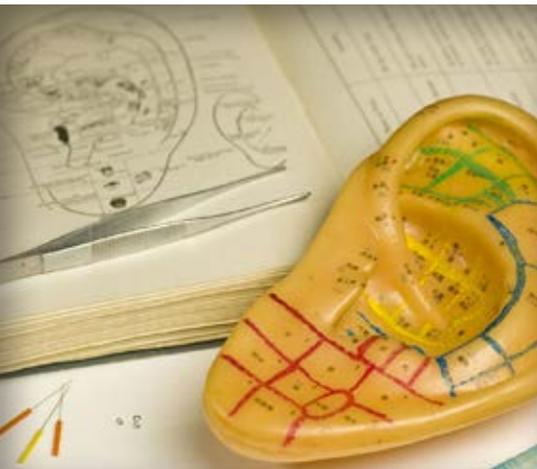
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The Effects of Auricular Point Acupressure on Graduate Students' Perception of Anxiety and Quality of Life: A Feasibility Study

By Yan Chen, OTD, LAc;
Tracey E. Recigno, OTD, OTR/L;
Doreen F. Lafferty, LAc, OTR/L, MT

Please see bios at end of the article.

Abstract

Objective: The purpose of this study is to evaluate the effects of the auricular point acupressure approach on graduate school students' perceived level of anxiety and their quality of life.

Method: This exploratory study used a one-group pre-test/post-test design. The Hamilton Anxiety Scale (HAM-A) was used to measure the perceived anxiety level, and the World Health Organization Quality of Life (WHOQOL) – BREF was utilized to evaluate the quality of life.

Result: Ten students were recruited and eight of them completed the study. Participants showed significant reductions in perceived level of anxiety. However, the pre-test/post-test changes of (WHOQOL) – BREF in this scoring were not significant in any areas.

Conclusion: The use of auricular point acupressure can be a beneficial complementary health approach for graduate school students who have increased perceived levels of anxiety. Students studying other professions may be able to utilize this technique in the higher education setting to reduce students' perceived level of anxiety and thus promote their health and wellbeing. Further research on this technique is suggested.

Introduction

Graduate school students often report an increased level of perceived anxiety. A Healthy Minds Study (2016-2017) data report indicated that approximately 26% of the students experienced anxiety disorder, about 31% had elevated levels of generalized anxiety, and 11% of the students had suicidal ideation.¹ Some symptoms of anxiety also include excessive worries about certain topics and activities, breathing difficulties, feeling tired, and insomnia.²

For severe anxiety cases, medical intervention might be needed. Different types of coping strategies that graduate students prefer to utilize are "confrontive coping, distancing, accepting responsibility and escape avoidance," depending on their age, contextual, and perceived contextual factors.³

Auricular point acupressure (APA) is one modality of auricular therapy, which also includes acupuncture using needles, electro-acupuncture, ear seeds, laser, moxibustion, blood-letting therapy and pressure by hands.⁴ Auricular therapy is a modality “whereby the external surface of the ear (the auricle) is stimulated to alleviate pathological conditions in other parts of the body.”⁵

According to WHO, auricular therapy can be utilized as a healthcare modality to provide a positive outcome of regulating the whole body function.⁶ The mechanism of auricular therapy involves the connection between the auricle and autonomic nerve system, the influence of delta reflex on vagal nerve, and anti-inflammatory and anti-oxidative effect.⁴ Auricular therapy has been applied for relieving stress and anxiety for variety of populations, for example, cancer patients, preoperative patients, peri- and early postmenopausal women, healthcare providers, patients with hypertension, elderly patients with anxiety disorder, and students who have anxiety towards academic activities.⁷

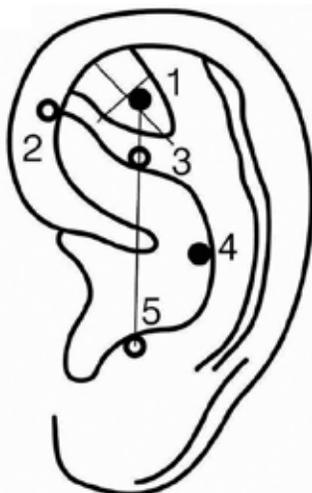
APA provides acupoint stimulation by using small seeds from the vaccaria plant that are taped onto patients’ ears. The ear seeds can stay on the points for 1-7 days depending on the individual’s situation. When necessary, patients can receive more stimulation by applying pressure on the ear seeds. APA acupressure provides less effect using this same duration. It can, however, show the same outcome as acupuncture when acupuncture needles are inserted for a longer period of time.⁸

One of the APA approaches, known as the “NADA protocol,” utilizes the standardized five needle auricular acupuncture technique. Created by the National Acupuncture Detoxification Association (NADA) in the 1970s, it was originally used to address opiate addiction.

The NADA protocol involves insertion of acupuncture needles or taping the ears seeds to 1-5 auricular acupoints located in each ear. These points are Sympathetic, Shen Men, Kidney, Liver, and Lung points (see Figure 1).

Figure 1.

1. Sympathetic point
2. Shen Men point
3. Kidney point
4. Liver point
5. Lung point



“According to WHO, auricular therapy can be utilized as a health care modality to provide a positive outcome of regulating the whole body function.”⁶

NADA protocol use has expanded when treating people with various diagnoses in diverse cultures, economic, and social settings.⁹ The effectiveness in reducing cravings (drugs, cigarettes, etc.), depression, and anxiety shows this can be a safe, effective procedure incurred at minimal cost.¹⁰

Research evidence indicates that use of APA to reduce anxiety levels has positive effects for various populations. Han et al. (2015) conducted a randomized experimental study to determine the outcome of a combination of auricular plaster therapy along with functional exercise for menopausal women with anxiety disorder. This study showed that this combined program can have positive outcomes for menopausal women with anxiety disorder.¹¹

In a randomized experimental study with 86 patients with confirmed primary hypertension, Li et al. concluded that traditional Chinese auricular point therapy can reduce blood pressure and anxiety.¹² Luo et al. conducted a randomized experimental study to evaluate the effect of auricular acupressure on patients with anxiety before gynecological surgery. This study suggests that auricular acupressure is an easily applied method in patients and demonstrates great advantage in reducing anxiety for patients undergoing surgery.¹³

A controlled, randomized double blinded study conducted by Lunes et al. (2015) suggests that auricular therapy has an advantage in treating university students with anxiety and temporomandibular joint dysfunction. No research was found on the use of APA designed to reduce increase perceived levels of anxiety among graduate school students.

When applying the APA approach, healthcare providers are encouraged to use a holistic theory to guide practice. The Environment–Health–Occupation–Well-Being (E–HOW) Model is a practice model that provides such a framework for healthcare practitioners to more easily guide practice that focuses on well-being and QOL as the outcome.¹⁴

The E–HOW model was selected as the theoretical basis because of its relevance concerning the major assumptions to the study (see Figure 2). The following assumptions of the E–HOW model apply to the proposed study in particular: 1) individuals strive to improve their health, well-being, and QOL and 2) participation in meaningful occupations and occupational performance affect well-being and QOL.¹⁴

The E-HOW model demonstrates how the three main factors—health, environment, and occupational participation—affect people's quality of life and well-being. Therefore, according to this model, the researchers emphasized the health component in the study—particularly their mental health—to enhance the participants' quality of life and wellbeing.

Figure 2. E-HOW Model¹⁴



The intent of this study is to evaluate the effectiveness of APA to reduce graduate school students' perceived anxiety and explore whether practitioners can utilize APA as a preparatory intervention to increase graduate school students' wellbeing. This may be especially effective for students in the integrative health field.

Method

Research Design

This study used an exploratory one-group pre-test/post-test design. It was conducted at the Won Institute of Graduate Studies in Glenside, PA. The school provides graduate level programs in acupuncture, Chinese herbal medicine, and Won Buddhist studies.¹⁵ This study was approved by the University of the Sciences' institutional review board.

Participants

A convenience sampling method was utilized used to recruit participants. Researchers sent emails to students to determine if they were interested in participating in the study. Recruitment flyers were also distributed at the Won Institute of Graduate Studies.

The inclusion criteria were: (1) full-time student at the Won Institute of Graduate Studies; (2) available for APA sessions. The exclusion criteria were (1) epilepsy; (2) heart failure; (3) liver failure; (4) renal failure; (5) allergic to alcohol prep wipes, vaccaria seeds, or surgical tape; (6) being pregnant (7) the possibility of missing one or more sessions.

The selected participants were provided a consent form describing the study's purpose, benefits, the potential risks and the procedure of the

study. The verbiage assured participants that their personal information would be protected and informed participants that they could withdraw from the study at any time. The consent form also thanked them for participating in the study.

Instruments

Demographic Questionnaire: This collected the participants' general information about sex, age, race and ethnicity. (See Table 1.)

Table 1. Demographic characteristics of participants at baseline Baseline Characteristics (n=8)

	n(%) or M (SD)
Age	39.4 (15.9)
Sex	
Female	8 (100%)
Male	0 (0%)
Race	
White	7 (87.5%)
More than one race	1 (12.5%)
Ethnicity	
Not Hispanic or Latino	7 (87.5%)
Hispanic or Latino	1 (12.5%)

Medical/ Family History Screening: This was provided to the graduate students to assess whether or not they met the inclusion and exclusion criteria.

Hamilton Anxiety Rating Scale (HAM-A)

The Hamilton Anxiety Rating Scale (HAM-A) was administered by the researchers before the study and after three sessions of the APA protocol to assess the anxiety level of the participants. This Scale was designed for use with adults, adolescents, and children to evaluate the severity of their symptoms of anxiety.¹⁶ It is a self-reported assessment instrument consisting of 14 items that takes 10-15 minutes to complete.

Each item has a scale from 0 (not present) to 4 (very severe), with a total score ranging from 0 to 56. A higher score indicates more severe symptoms of anxiety; a score less than 17 means mild severity; 18 to 24 indicates mild to moderate severity; and 25 to 30 implies moderate to severe anxiety level.¹⁶

The HAM-A was developed to measure both psychic anxiety ("mental agitation and psychological distress") and somatic anxiety ("physical complaints related to anxiety").¹⁶ Psychic anxiety consists of seven dimensions: anxious mood, tension, fears, insomnia, intellectual, depressed mood, and behavior at the interview, while the somatic anxiety covers the rest of the seven dimensions: muscular, sensory, cardiovascular symptoms, respiratory symptoms, gastrointestinal symptoms, genitourinary symptoms, and autonomic symptoms.

The interrater reliability of HAM-A total score is 0.74, while the interrater reliability of psychic anxiety is 0.73 and the total score of Somatic anxiety is 0.70. In addition, HAM-A has sufficient concurrent validity: Spearman coefficients is 0.63 between the total score of the Covi Anxiety Scale and 0.75 between the global rating and the total HAM-A score.¹⁷

The World Health Organization Quality of Life (WHOQOL)-BREF

The WHOQOL-BREF was also administered both before and after three sessions of the APA protocol to evaluate the changes in quality of life among the study's participants. It is a short version of WHOQOL – 100.

The WHOQOL-BREF is an easily administered assessment tool that measures the individual's perception of his/her quality of life, health, and other areas of life.¹⁸ It consists of four domains of quality of life: physical, psychological, social, and environment.¹⁹

The WHOQOL-BREF is a self-administered instrument except for those who have difficulties in self-completion. (In this situation, the researchers provide assistance by reading it out loud to the participants.) The WHOQOL-BREF utilizes a 5-point Likert interval scale to collect the response: 1 – not at all, 2 – a little, 3 – moderately, 4 – mostly, 5 – completely.

It has good to excellent psychometric properties of reliability and validity. For internal consistency reliability, the value of Cronbach's alpha was above 0.7 for domains 1, 2, and 4. In a comparison of domain scores from both sick and well populations, discriminant validity is significant for each domain. In terms of construct validity, the BREF is strongly associated with the domains of psychological and environment.¹⁷

Procedures

All participants received and completed a demographic questionnaire and medical/family history screen before the study as well as a pre-test of both HAM-A and WHOQOL-BREF. They were then provided APA protocol once a week for three weeks. The first session included an APA training session to explain the protocol, the wearing schedule, how to apply the ear seeds to the points and remove the ear seeds, and how to massage these points.

The first session took place in the student clinic at the Won Institute of Graduate Studies. The researchers introduced themselves to the participants and explained the details of the procedure as well as the benefits and risks of the APA intervention. The students were then asked to sit in comfortable chairs in a quiet and peaceful environment that included soft lighting and appropriate room temperature.

The participants' external ears were cleaned with an alcohol preparation pad before the procedure. The researchers then placed the ear

seeds taped onto the participants' external ears on 2-5 auricular points (Shen Men, Liver, Lung, Sympathetic, and Kidney points) for acupoint stimulation. NADA protocol states the "placement of 1-5 needles or seeds in 1-2 ears," so the variation in numbers of seeds placed falls within the protocol. Additionally, the participants were provided a short training session on how to massage these points between sessions so as to continue the stimulation of the auricular points.

Once the ear seeds were applied by the researchers to both ears, following the NADA protocol, they remained on the points for up to one week, depending on the participants' skin condition and their tolerance. The student participants were informed that they could remove the ear seeds during the week if they had any discomfort such as nausea, dizziness, headache, or itching. The participants were also taught how to locate and apply the ear seeds on the points.

In the second session, the participants demonstrated to the researchers how to place the ear seeds to ensure that they could do this correctly. In the third session, students performed this procedure at home using the instructions and ear seeds provided by the investigator.

The participants were asked to massage the points with ear seeds three times a day for five minutes and wear the APA ear seeds continuously for one week. The participants received a checklist to help keep track of this. All eight participants reported they massaged the points with the ear seeds attached three times daily during the study. (see Table 2)

When the participants returned a week after their last session, they completed the APA protocol and completed the post-assessments of both the HAM-A and the WHOQOL-BREF. The first and second sessions took place in the student clinic at the Won Institute of Graduate Studies. The third session was completed in participants' homes.

Table 2. Study Procedure

Week	Activity	Time Spent	Location
1	Complete pre HAM-A Complete pre WHOQOL-BREF Complete demographic form Receive training Receive ear seeds placement by investigator	30 minutes	Student clinic at Won
2	Self-placement of ear seeds guided by investigator; placement accuracy confirmed by investigator	2-5 minutes	Student clinic at Won
3	Correct self-placement of ear seeds as taught by investigator	2-5 minutes	Preferred location for participant
4	Complete post HAM-A Complete post WHOQOL-BREF	15 minutes	Student clinic at Won

continued on page 10

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Data Collection

Quantitative measures were collected using the HAM-A and the WHOQOL-BREF for students' perceived level of anxiety and their perception of quality of life. The researchers collected data including the demographic questionnaire, medical screening, HAM-A, and WHOQOL-BREF before implementing the APA approach. After completion of the three sessions, the researchers again collected both the HAM-A and WHOQOL-BREF data.

Data Analysis

Descriptive statistics were used to determine the median for pre-test and post-test scores as well as the means and standard deviations for some demographic variables. The R commander was used for quantitative data analysis. The coded demographic data that included gender, age, race, and ethnicity were entered into R commander to obtain frequency and percentage of the population. Normality of the data was checked and indicated non-normal distribution. Therefore, Wilcoxon signed-rank was utilized for nonparametric tests to exam pre- and post-test differences.

When p-values fall within either tail of critical region ($\alpha = .05$), the changes are statistically significant. Then the researchers failed to reject the alternative hypothesis.

Results

A total of 10 participants were recruited and consented to participate in this study. All participants completed the screening questions prior to the study and performed consent for the full study. Two participants were excluded because they did not complete their post assessments, thus a total of eight participants completed the project (n = 8).

“The primary objective of this study was to examine the effect of the APA approach on perceived level of anxiety in graduate school students.”

None of the participants reported any severe adverse effects during the duration of the full study. The gender distribution was eight females (100%) and no males (0%). Regarding the frequency of race, seven participants were white (87.5%) and one participant was more than one race (12.5%). Seven participants were not Hispanic or Latino (87.5%), and one participant was Hispanic or Latino (12.5%). Due to lack of previous studies conducted using APA among graduate school students on reducing perceived level of anxiety, power analysis was not calculated.

The median pre-test HAM-A anxiety scale score was 17.5 (M=18.5) and the post-test HAM-A anxiety scale score decreased to 12 (M=13.13) (Table 2). The Wilcoxon signed-rank test indicated that post-test anxiety was significantly lower than pre-test anxiety with a large effect size (p = .0156, d = -6.5, confidence interval = [-9.0, -6.5]). The result of WHOQOL-BREF did not reveal statistical change (See Table 3). Effect size was not calculated because no previous study had been conducted on the same population.

The pre-test and post-test changes of WHOQOL-BREF scoring were not significant in any domains. However, results of pre-test/post-test in two domains (psychosocial and social relationships) approached significant changes. The p value of these two domains were 0.0625, which was very close to 0.05 (Table 3). The median pre-test physical was 56 (M=51.5) and the post-test physical increased to 59.5 (M=57.6). The median pre-test psychological was 59.5 (M=53.3) and the post-test psychological increased to 66 (M=62.6). The median pre-test social was 62.5 (M=59.4) and the post-test social increased to 75 (M=71.9). The median pre-test environment was 69 (M=73.4) and the post-test environment increased to 72 (M=76.8) (Table 3).

Table 3. Comparison of outcomes before and after APA approach sessions, over four weeks

Outcome Assessments	Pre mean (SD)	Pre median (IQR)	Post mean (SD)	Post median (IQR)	Effect size* (CI)	p
HAM-A	18.5 (7.38)	17.5	13.1 (6.73)	12	6.5 (9, 4.5)	0.0156
WHOQOL-BREF						
Physical	51.5 (13.02)	56	57.6 (11.29)	59.5	6 (0, 7)	0.0625
Psychological	53.3 (19.00)	59.5	62.6 (7.65)	66	6.5 (-6.5, 19)	0.2013
Social	59.4 (27.22)	62.5	71.9 (16.87)	75	9 (0, 19)	0.0625
Environment	73.4 (9.08)	69	76.8 (9.90)	72	1.5 (0, 6.0)	0.125

Note. IQR = interquartile range; CI = confidence interval; WHOQOL-BREF = World Health Organization Quality of Life

Brief Version: Statistical significance at p < 0.05

* Result of Effect size is from R calculation

Discussion

The primary objective of this study was to examine the effect of the APA approach on perceived level of anxiety in graduate school students. The results indicate that the approach is effective in significantly decreasing anxiety ($p < .05$) for participants. The outcomes of this study were consistent with current studies that suggests a reduction in anxiety after applying APA technique intervention (Lunes et al.,²⁰ Li et al., 2017;¹² Luo et al., 2016¹³). This study also suggests that APA can be used as a complementary health approach to reduce perceived level of anxiety in graduate school students.

The secondary objective of this study was to evaluate the effect of the APA approach on quality of life in graduate school students. Results of pre and post-test of WHOQOL-BREF scoring were not statistically significant. The Psychosocial Domain of QOL approached significance ($p = 0.06$). In addition, the Social Relationships Domain of QOL also approached significance ($p = 0.06$).

These results demonstrated consistency with recent literature providing evidence that APA approach is effective on improving quality of life.²¹ Post-test results from six participants showed improvements compared to pre-test in all four domains. Also the post-test results indicated two participants showed increased quality of life in three domains: physical, psychological, and social.

This study was only implemented over four-weeks. It may take a longer period of time for the participants to experience a significant change in their quality of life. This suggests that future research should use a longer period of study implementation to allow any change in participants' quality of life.

There were several limitations in this study. The sample size is small; only eight participants completed full study. Small sample size might be one reason why changes in the pre-/ post-test WHOQOL-BREF scoring were not significant in any domain. Also, this is an exploratory study which is limited in scope.

Last but not least, all participants in this study are graduate students in an acupuncture program; they may be more open to accepting this type of approach. They also may have bias regarding application of auricular point acupressure. Future researchers should consider a powered randomized control trial with a larger sample size to examine the effects of this approach for perceived level of anxiety.

Implication for Practice

A four-week study of eight graduate school student participants showed decreased anxiety level with use of APA. This outcome suggests that APA may be an effective preparatory approach to management of anxiety in graduate students. In addition, psychosocial and social relationships aspects of quality of life may show improvement with use of APA as these domains approached significance on the WHOQOL-BREF.

Use of the APA approach by acupuncturists and other integrative health practitioners may assist graduate students in reducing their perceived level of anxiety and improve their health and wellbeing. For example, it may reduce the perceived level of exam-taking anxiety and thus improve students' test performance.

Students can also learn to apply ear seeds between treatment sessions to keep anxiety at a reduced level when attending classes and studying. Doing so may prove helpful in the student's development as a healthcare practitioner. Future research with a larger cohort of students should be done to compare against this exploratory study.

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A Model for Integrating Acupuncture into Supportive Care in Oncology

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Abstract

Evidence for the efficacy of the use of acupuncture for supportive care in an oncology setting has prompted clinicians to establish guidelines to safely and effectively deliver acupuncture services within the context of conventional care. Developing standard operating procedures and adhering to established practice guidelines facilitates the safe provision of acupuncture services. We provide a feasible model for the provision of acupuncture alongside conventional medical care to adults and children undergoing treatment for cancer at an urban, academic medical center.

Key Words: medical oncology, pediatric oncology, neoplasms, integrative medicine, acupuncture, medicine, traditional Chinese medicine, clinical practice guidelines

Introduction

Acupuncture has emerged as having a therapeutic role for symptom management among adults and children with cancer.¹ A literature search reveals close to 800 articles published over the past decade on the role of acupuncture within cancer care. Systematic reviews have found that acupuncture is an effective supportive care modality for the management of chemotherapy-induced nausea/vomiting, pain, radiation induced xerostomia and anxiety.^{2,3} Clinical studies have also reported that acupuncture may be effective in reducing hot flashes experienced by adults with breast and pancreatic cancer, decreasing lymphedema, and for the management of insomnia.^{2,4,5,6}

There is still much to learn about the mechanisms by which acupuncture may impart a beneficial effect to adults and children with cancer. Several studies demonstrate that acupuncture may have a regulatory effect on the neural, endocrine and immunologic systems.^{7,8} The effect of acupuncture on adrenocorticotropic hormone and serotonin, dopamine, and norepinephrine may explain its effect on pain, depression and anxiety.^{5,9} Evidence also suggests acupuncture needling may encourage connective tissue health and promote analgesic effects.¹⁰

The expanded use of acupuncture within existing supportive care regimens and the described benefit reported by children and adults with cancer have prompted clinicians to establish guidelines to safely and effectively deliver acupuncture services within the context of conventional care. The Society for Integrative Oncology has published guidelines on the use of acupuncture in general oncology¹¹ and specifically for adults with lung¹² and breast¹³ cancer. These guidelines provide an overview of the evidence in order to inform clinicians, patients and researchers on the safety and efficacy of the use of acupuncture in the oncology setting.^{11,12,13,14}

Acupuncture is recommended for adults experiencing poorly controlled pain and xerostomia¹¹ and for children experiencing chemotherapy-induced nausea/vomiting.¹⁵ Guidelines specific to adults with lung cancer recommend acupuncture for peripheral neuropathy and for anxiety, fatigue and quality of life in patients with breast cancer.^{12,13}

With the increasing evidence for safety and efficacy of acupuncture in oncology, there is a further need to establish guidelines for the provision of acupuncture services and its integration within conventional medical institutions. We describe acupuncture practice guidelines for treating adults and children with cancer in a comprehensive supportive care program within an urban academic medical setting.

Model of Care

Established in 1998, the Integrative Therapies Program (ITP) was developed to provide supportive care services to children and adolescents with cancer. The ITP was the first fully integrated complementary and alternative program in the United States for pediatric oncology. Located in the outpatient unit of the Herbert Irving Child and Adolescent Cancer Center, the ITP specializes in clinical care, research, and education for children with cancer and their families from diagnosis into survivorship.

Treatments are provided in all areas of patient care, including the outpatient and inpatient settings, radiation oncology, and the pediatric emergency room. Acupuncture services began in 2005 and in 2014 expanded into several adult oncology divisions and the adult outpatient infusion center. To ensure access to acupuncture across all socioeconomic groups, acupuncture is provided free of charge to all patients.

General Considerations

Provision of acupuncture and other integrative therapies such as massage, acupressure, aromatherapy, and mind-body therapies are provided directly alongside conventional care—a hallmark feature of ITP. Delivering acupuncture treatments without interfering with

the timely delivery of conventional care requires close collaboration and communication with nursing staff, who often serve as the point person to communicate immediate needs for symptom management. Acupuncture is most frequently delivered in settings where specific complaints may be immediately addressed such as in the outpatient chemotherapy infusion center or in the hospital room during an inpatient stay. Providing acupuncture treatments concurrent with conventional care minimizes interruption in the flow of standard treatment, with the added benefit of minimizing the number of patient appointments.

To guide the delivery of care, protocols were established through collaboration between ITP clinicians and the conventional medical team [Figure 1]. Clean needle technique guidelines are followed as administered by the Council of Colleges of Acupuncture and Oriental Medicine.¹⁶ The Center for Disease Control (CDC) practice guidelines for safely administering care to immunocompromised patients, or those who have or are suspected of infectious disease, are strictly adhered to in all settings.¹⁷ The development of standard operating procedures facilitates the safe provision of services, fosters a productive relationship between the ITP and the conventional medical team, provides a framework for quality control and evaluation, and establishes a structure for research initiatives.

The education of the conventional medical staff was essential to breaking down the barriers of delivering acupuncture. The ITP recruited experienced licensed acupuncturists with at least five years of experience and who were able to communicate effectively about the potential risks and benefits of acupuncture to other members of the healthcare team. The ITP also initiated an education day where oncologists, nurses, and other medical professionals could experience acupuncture and learn about its application in the medical setting. Clinician experience with acupuncture has facilitated collaboration among all medical disciplines by providing them with a thorough understanding of the underlying theory, diagnostic approach, and clinical application.

Referral Pattern

Adults and children are eligible for an acupuncture consultation from the time of initial diagnosis and may be referred by an oncologist, ITP clinician, oncology fellow, nurse practitioner, social worker, or other clinical staff. Patients may also self-refer or learn about ITP from another patient. Upon referral, an ITP acupuncturist meets with the patient and their family to provide a comprehensive overview of the risks and benefits of acupuncture and assess whether the patient is likely to benefit from acupuncture for a specified symptom. Eligible candidates for acupuncture services are coordinated through the program's clinical coordinator.

Prior to the initiation of acupuncture services, treatment concerns raised by either the oncologist or the ITP acupuncturist

are reviewed, and the safest method of delivery is determined. Following physician approval, an informed consent form is completed and all risks and benefits are again reviewed with the patient and their family. Once acupuncture has been initiated, ongoing treatment continues at the discretion of the providing acupuncturist and request of the patient. If there is a significant change in the patient's medical condition, the patient's primary oncologist may be contacted again to provide approval to continue acupuncture treatment [Figure 1].

Circumstances in which a second approval may be obtained include a change in the severity of an existing condition, arrival of a new condition, disease progression, conditions that require additional supportive medical care, (e.g., mechanical ventilation, hemodialysis, oscillation), and entering a new phase of treatment, (e.g., radiation to chemotherapy or chemotherapy to stem cell transplant). Acupuncture treatments may be discontinued if other integrative therapies may be more beneficial for the condition or treatment is directed toward family based care such as in the end of life setting.

Patient Assessment and Treatment

A review of the medical record and oncologic treatment plan coupled with an intake, which includes the chief complaint(s), and a review of systems based upon traditional Chinese medicine (TCM) is performed on each patient. A TCM examination includes four diagnostic methods: inspection, auscultation and olfaction, inquiry and palpation. Observation includes assessment of the tongue (including color, form, coating), patient's body shape and facial complexion. Listening includes assessing strength and quality of the voice and breath, presence of cough or congestion, and sounds related to the quality and intensity of pain. Smelling includes assessing the presence, location, intensity and nature of pathogenic odors. Inquiry includes the onset and development of the chief complaint, including any associated symptoms. In addition, a thorough history is conducted to understand both the patient's current constitution and if possible, his/her constitution pre-cancer diagnosis and treatment.

Palpation of the radial pulse bilaterally is conducted, and depth, speed, strength, shape and rhythm are noted. Palpation of other areas of the body may be used when appropriate. This assessment process leads to the identification of the individual's TCM pattern of disharmony and the development of an initial treatment plan based upon the patient's constitution, severity of symptoms, response to treatment (both conventional and integrative) and the conventional medical plan.

This assessment, performed at each clinical encounter by the licensed acupuncturist, provides the basis for the acupoint prescription. Often, symptoms may change rapidly. In these clinical

circumstances, the patient is reassessed using the described methods, and the treatment plan is modified accordingly. By integrating this approach, the ITP adheres to the traditional practice of TCM in lieu of a prescription-based approach.

ITP acupuncturists perform daily rounds in the adult and pediatric outpatient infusion centers and on the pediatric inpatient and intensive care units. Services are also provided in the pediatric radiation center and pediatric emergency department. Integrating acupuncture with conventional cancer treatment allows for immediate attention to acute treatment side effects, enhances symptom management and reduces anxiety associated with treatment or disease. For example, ITP routinely provides acupuncture treatment prior to or during the beginning of a chemotherapy infusion associated with nausea and vomiting with the objective of reducing or avoiding the side effect altogether.

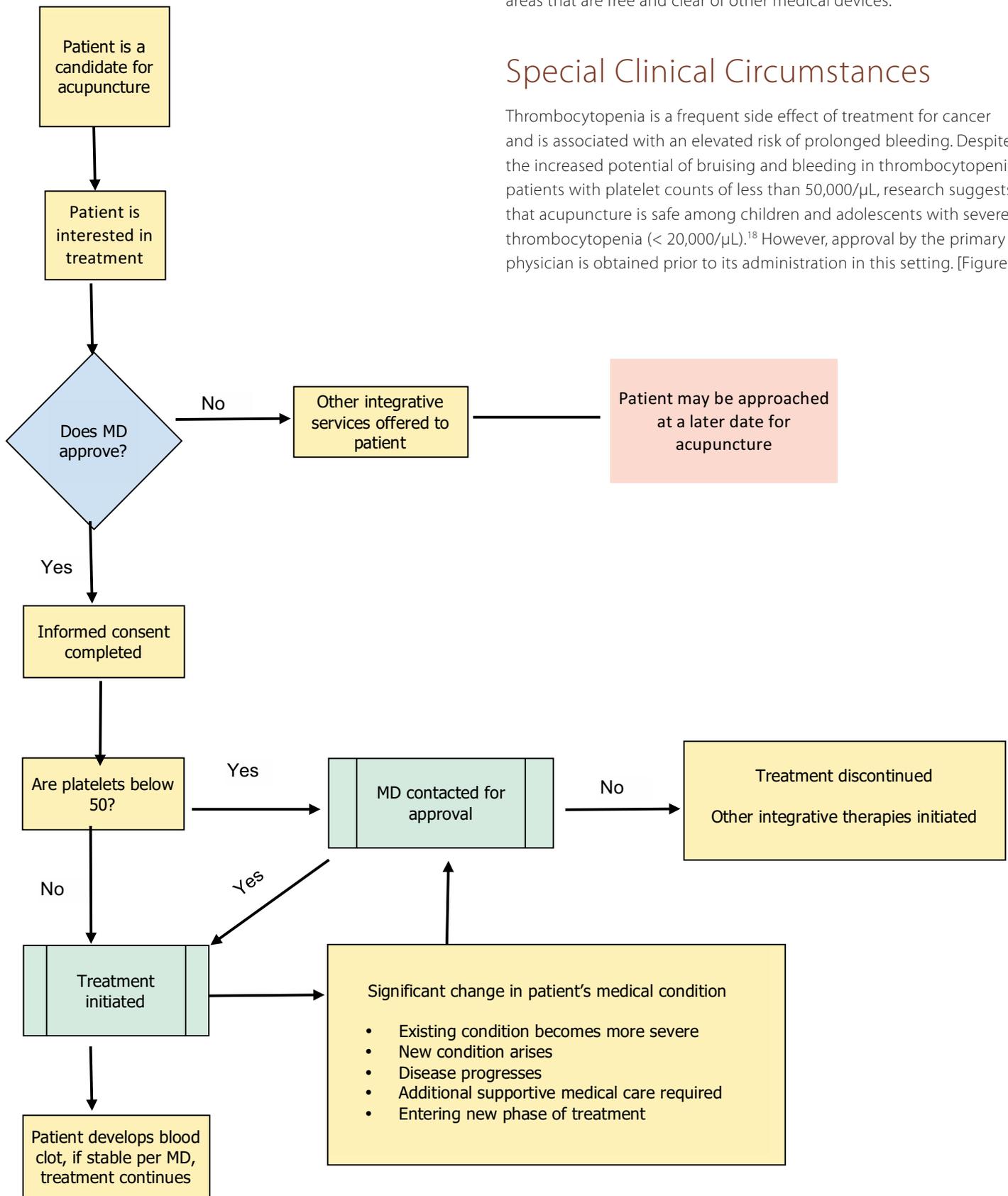
The ITP also maintains a private treatment room for patients who require more privacy or request treatment on days outside of a scheduled treatment appointment. All treatments are documented in the electronic medical record (EMR) including the chief complaint, related signs and symptoms, TCM diagnosis, treatment principle, acupuncture points needled, number of needles inserted and withdrawn and length of time of needle retention. The most recent platelet count and any adverse events, such as acute bruising or bleeding, are also recorded.

Coordination of Care

The ITP team meets weekly to discuss patients undergoing treatment as well as those patients who have completed therapy. During these multidisciplinary meetings, treatment plans are developed, coordinated, evaluated and revised as necessary. Team meetings with oncologists, nursing, and disease-specific teams also occur weekly where new and existing patients are discussed and treatment plans are established. Members of the ITP team regularly attend medical and psycho-social rounds, pediatric palliative care, and mortality and morbidity meetings. Our model ensures open and clear communication between all members of the medical team.

Delivering acupuncture around scheduled medical procedures requires flexibility by the acupuncturist. ITP clinicians work closely with the nursing staff to coordinate treatment around scheduled conventional care, as patients may be late returning from a procedure or may need to have an unanticipated procedure that could preclude or shorten the time allotted for acupuncture. As the program has matured and inter-professional relations have strengthened, it has resulted in the near seamless integration of conventional and complementary treatment. However, modification of acupuncture delivery is sometimes required to accommodate patients' positioning on the bed or chair or to

Figure 1 Acupuncture Clinical Care Model



navigate necessary medical equipment. During these times, acupuncture point prescriptions may need modification and are only administered to areas that are free and clear of other medical devices.

Special Clinical Circumstances

Thrombocytopenia is a frequent side effect of treatment for cancer and is associated with an elevated risk of prolonged bleeding. Despite the increased potential of bruising and bleeding in thrombocytopenic patients with platelet counts of less than 50,000/ μ L, research suggests that acupuncture is safe among children and adolescents with severe thrombocytopenia (< 20,000/ μ L).¹⁸ However, approval by the primary physician is obtained prior to its administration in this setting. [Figure 1]

“As per routine TCM practice, patients with cancer should be assessed for constitutional strengths and weakness, level of fatigue, hunger and thirst and previous experience with acupuncture. Caution should be taken with those who are in a weakened state, overly fatigued, have not eaten, or are dehydrated.”

Adults and children who are severely neutropenic, absolute neutrophil count (ANC) <500 cells/ μ L, are at greater risk for infection. Prospective studies have found that acupuncture is safe in the setting of severe neutropenia.¹⁹ Moreover, studies performed among adults have found that acupuncture is not only safe in the setting of neutropenia but may actually have a beneficial effect on median leukocyte value.^{20,21} Most recently, a prospective trial among children with cancer found no increase in adverse events in the setting of neutropenia.²² Our current standard of practice does not exclude the provision of acupuncture for children and adolescents with severe neutropenia.

Lymphedema and deep vein thrombosis (DVT) are two clinical circumstances where ITP acupuncturists are guided by the oncologist's assessment of the patient's evolving condition to ensure safe delivery of care. Acupuncture has been found to be safe and effective for patients with lymphedema;²³ however, the patient's oncologist is contacted prior to initiating acupuncture. Acupuncture needle insertion along the affected limb is initiated only with physician approval and otherwise avoided.

Special attention is warranted when blood clots are present due to the potential effect of acupuncture on the movement of blood.²⁴ Acupuncture is administered only after the oncologist provides approval and determines the clot is stable. Acupuncture is always contraindicated near or around areas where the integrity of the skin is compromised, directly or adjacent to a tumor site, or near an intravenous line or port.

Needling Considerations

Adults and children with cancer may or may not be any more sensitive to acupuncture needling sensations compared to a non-cancer population. As per routine TCM practice, patients with cancer should be assessed for constitutional strengths and weakness, level of fatigue, hunger and thirst and previous experience with acupuncture. Caution should be taken with those who are in a weakened state, overly fatigued, have not eaten, or are dehydrated. Choice of needle length, gauge, and method of manipulation is based upon the patient's presenting constitution, the area to be needled, and the desired treatment response.

Unique Considerations for the Pediatric and Adolescent Population

Children with cancer have a high acceptance rate of integrative therapies.²⁵ When introducing acupuncture to children and parents, a step-wise approach is implemented to ensure the comfort with and understanding of acupuncture. First, a detailed description of acupuncture and its function from a TCM and conventional medical approach is explained. The acupuncturist shows the patient an acupuncture needle and explains where the needle(s) will be placed, the desired treatment outcome (e.g., reduce nausea, stop pain). The practitioner describes the sensation that will most likely be experienced and the length of time of needle retention.

Any questions that the child or their parents have are answered. Needles are generally retained longer with older children and adolescents than with toddlers and infants, where needles are inserted, stimulated and may be immediately withdrawn. Sometimes children will ask that their parent receive acupuncture first. This gives the parent a chance to relay their experience to their child and reassure them that it is safe and comfortable.

Prior to needle insertion, all patients (children and adults) are informed that if they become uncomfortable at any time during the treatment they may request that one or all of the needles be immediately withdrawn. After the needles are inserted, the acupuncturist remains with all patients during the treatment to ensure close monitoring during the acupuncture session.

Conclusion

Acupuncture is an accepted supportive care modality for both adults and children with cancer.² As cancer centers begin to fully integrate acupuncture into supportive care regimens, it is important to consider its safe and timely delivery. Experienced acupuncturists, who have an understanding of conventional cancer treatment and are able to work alongside the medical, radiological and surgical oncology teams, can have a significant impact on the care of patients undergoing cancer treatment.

Open communication between the medical team, the patient and their family, other support services and the acupuncturist leads to collaborative comprehensive cancer care. Essential to the safe and effective delivery of acupuncture in the oncology setting is the development of a comprehensive integrative acupuncture treatment plan that is reviewed and modified as necessary as the patient's medical care evolves. We provide a model for its integration to adults and children undergoing treatment for cancer.

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Case Report

Treatment of Joint Injuries and Inflammation in a Professional Brazilian Jiu-Jitsu Athlete

By Ryan Luna, LAc

Ryan Luna, LAc completed his Master's Degree in Acupuncture and Oriental Medicine at Texas Health and Science University in Austin, Texas, in 2014 and is currently working to complete his doctoral degree at Oregon College of Oriental Medicine in Portland, Oregon. Ryan is also researching the interconnections of religion and medicine in the Song dynasty as part of a graduate program at Cal State Long Beach. He may be reached at: mynameisRyanLuna@gmail.com

Photo above supplied by author and used with permission

Abstract

Brazilian Jiu-Jitsu is a grappling martial art that has become quite popular all over the world. This case report concerns the use of traditional Chinese medical bloodletting and acupuncture to treat proximal interphalangeal joint inflammation and injury in an athlete competing in this sport. A total of three acupuncture and bloodletting treatments within a fourteen-day period improved the patient's range of motion and strength of grip. The patient also indicated that pain reduction occurred over the course of the treatments. Traditional Chinese acupuncture and bloodletting may be a useful complementary therapy in the treatment of Brazilian Jiu-Jitsu athletes and warrants further research.

Key Words: Brazilian Jiu-Jitsu, hand pain, finger pain, sports acupuncture

Introduction

Biomedicine

Proximal interphalangeal (PIP) joint injuries are common in sports activities. These include collateral ligament injuries, volar plate injuries, dislocations, and intraarticular fractures.¹ A sudden abduction or adduction injury to a finger may either partially or completely tear a collateral ligament.² If the ligamentous tear is incomplete, the finger is painful and swollen but the injured joint is stable.²

According to a study titled "Clinical Outcomes of Operative Repair of Complete Rupture of the Proximal Interphalangeal Joint Ligament," collateral ligament injury of the proximal interphalangeal (PIP) joint is an injury commonly encountered by orthopedic surgeons.³ The treatment goals of PIP joint collateral ligament injury are recovery of joint stability and achievement of normal ranges of motion. Patients also desire rapid functional recovery, limited pain during treatment, and good appearance of the PIP joint. The general consensus is that incomplete rupture of the PIP collateral ligament should not be treated operatively.³

In a study surveying the acute injuries of BJJ athletes in five competitions, the most common injury was found in the elbow.⁴ Despite the lack of studies involving the injury of Brazilian Jiu-Jitsu (BJJ) athletes specifically, data is available about other “grappling type” arts. In a study surveying Taiwanese elite wrestlers, the top three injured sites for males were waist, ankle joint and finger areas.⁵ In a literature review on common judo injuries, during the 2008 and 2012 Olympic Games, sprains, strains, and contusions—usually of the knee, shoulder, and fingers—were most frequently reported.⁶

PIP joint inflammation is a chronic condition that can develop in BJJ athletes over time. One of the fundamental techniques in BJJ is obtaining a grip on your opponent’s collar or sleeve of their Gi (the jacket used in competition, also sometimes called “Kimono”). Repetitive gripping may be the cause of many cases of PIP inflammation.

TCM

In traditional Chinese medicine (TCM), trauma is considered a “miscellaneous” external cause of disease. Because the nature of martial arts is a sports activity in which participants are highly likely to experience trauma, the TCM perspective of trauma deserves mention (see Figure 1).

Figure 1. Effects of trauma according to TCM

TRAUMA LEVEL	EFFECTS ON THE BODY
Slight trauma	<i>Qi</i> stagnation
Severe trauma	<i>Qi</i> stagnation & Blood stasis
External factor w/ old trauma	Painful obstruction syndrome w/ <i>qi</i> stagnation & Blood stasis

Figure 2. Differences between *qi* stagnation and Blood stasis/ stagnation

<i>QI</i> STAGNATION	BLOOD STASIS
Moving pain or a generalized pain, difficult to identify	Fixed, easy to locate
Onset occurs around stress	Onset not affected by stress
Pain is of a dull, radiating nature, can occur any time	Pain is sharp, stabbing, and intense, could be worse at night

Different types of physical trauma can occur in an individual and this can affect *qi* and Blood in different ways. Pain will present with different characteristics in the patient, usually manifesting in symptoms predominantly present as either *qi* or Blood stagnation (See Figure 2).

Figure 3. Internal causes of musculoskeletal pain according to TCM

<i>Qi</i> and Blood deficiency	Pale face, shortness of breath, fatigue, T: pale, P: deep, weak
Liver <i>qi</i> stagnation	Irritable, flank pain, frequent sighing, T: slightly red, P: wiry
Liver Blood deficiency	Pale lips & nails, dizziness, poor sleep: T: pale, P: weak
Spleen <i>yang/qi</i> deficiency	Fatigue, poor digestion, loose stools, cold limbs, T: swollen, pale, P: slippery or weak
Kidney <i>yin</i> deficiency	Low back pain, dizziness, tinnitus, poor memory, night sweats, thirst, T: red, P: weak
Kidney <i>yang</i> deficiency	Low back pain, cold limbs, pale face, fatigue, T: swollen, P: deep, weak

Figure 4. TCM treatment principles with basic acupoints

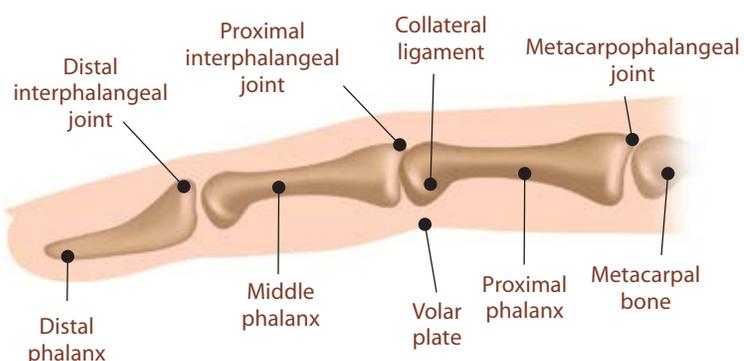
<i>Qi</i> and Blood deficiency	Tonify <i>qi</i> & Blood	Ren 6 <i>Qihai</i> , tonify <i>qi</i> , move <i>qi</i> ST 36 <i>Zusanli</i> , Tonify <i>qi</i> & blood
Liver <i>qi</i> stagnation	Soothe Liver	LV 3 <i>Taichong</i> , soothe Liver LI 4 <i>Hegu</i> , helps move LV <i>qi</i>
Liver Blood deficiency	Tonify Liver Blood	BL 18 <i>Ganshu</i> , LV <i>Shu</i> point BL 17 <i>Geshu</i> , influential point of Blood
Spleen <i>yang/ qi</i> deficiency	Tonify Spleen, <i>qi</i> & <i>yang</i>	BL 20 <i>Pishu</i> , <i>shu</i> point of SP SP 6 <i>Sanyinjiao</i> , tonify SP
Kidney <i>yin</i> deficiency	Tonify Kidney <i>yin</i>	BL 23 <i>Shensu</i> , <i>shu</i> point of KD KD 3 <i>Taixi</i> , <i>shu</i> stream KD point
Kidney <i>yang</i> deficiency	Tonify Kidney <i>yang</i>	(Same as above) + DU 4 <i>Mingmen</i> Strengthen KD <i>Yang</i>

TCM internal causes of musculoskeletal pain are described in Figure 3. Treatment principles and main points are listed in Figure 4.

Description

The 32-year-old male patient presented with hand pain in the PIP joints in his right hand. He experienced this pain on and off for a few years, with a recent flare-up due to over-training before a competition. The patient explained that his grip “gives out” and that his hand felt weak. His hand appeared swollen in the PIP joints, and he was experienced pain upon slight palpation in PIP joint medial and lateral collateral area.

The patient, a professional athlete, considered his diet to be healthy. He said he maintained a regular exercise schedule but had a tendency to over-exercise. He had a wiry pulse upon palpation and his tongue was slightly red with minimal tooth marks.

Figure 5: Basic anatomy of the metatarsals

Treatment included bloodletting using a “Unilet Comfort Touch Thin Lancet,” (Lancet brand) in the medial and lateral collateral ligaments of the third, fourth and five metacarpal PIP joints about ten punctures per side followed by needling PC-7 *Daling* and TE-4 *Yangchi* points with DBC .30 x 30 needle retained for fifteen minutes. This treatment was performed three times during a fourteen-day period.

The main treatment approach was to dredge the collaterals to relieve pain. This direction was chosen due to the stagnation present in the local channels. Trauma and the weakening of the Spleen and Liver function were causing stagnation from chronic overuse. PC-7 *Daling* and TE-4 *Yangchi* are great points to treat local wrist pain and were chosen because they were tender upon palpation. PC-7 *Daling* is the *yuan* source point of the Pericardium channel, located at the joint of the wrist between the flexor carpi radialis tendon and the palmaris longus tendon. TE-4 *Yangchi* is the *yuan* source point of the *San Jiao* channel, located at the dorsum of the wrist between the extensor digiti minimi tendon and digitorum communis tendon. Both acupuncture points relax the sinews and ease pain.

Bloodletting was chosen as an additional treatment to address the Blood stasis and chronic pain. The bloodletting method involved the “Diffuse Pricking” method or *san ci fa*, in which a lancet is used in multiple locations around a painful area. The Ashi points of pain chosen for bloodletting were located in the regions of the patient’s collateral ligaments, proper ligaments, accessory ligaments, and the retinacular ligaments of the affected metacarpals.

Discussion

In this single case, the patient experienced increased range of motion, relief of pain and increased grip strength after receiving three treatments of bloodletting and acupuncture over a fourteen-day period. The patient was able to continue sparring and prepare for future competitions.

“The main treatment approach was to dredge the collaterals to relieve pain.”

These treatment results may have occurred due to a removal of Blood stasis or the channel dredging of the local affected channels. Also, these treatment results may have occurred due to microtrauma of the collateral as well as retinacular ligaments, which caused new micro-growths of collagen by increasing the amount of fibroblasts present.

This patient had a high pain tolerance. It is possible that other patients may have difficulty receiving this type of treatment due to the painful sensations experienced through what is known as “Diffuse Pricking” bloodletting. Use of electroacupuncture with smaller gauge needles, at the insertion and origin of the PIP joint collateral ligament, may provide similar results if bloodletting cannot be performed on the patient.

Conclusion

Bloodletting and acupuncture may be a helpful complementary therapy for BJJ athletes who experience pain and inflammation in the PIP joints of the metacarpals. Further study and research are necessary to explore efficacy and the mechanisms of action in the treatment actions described. The results of this single case study are limited and preliminary.

Further studies involving more subjects, a randomized controlled design, and a more detailed treatment protocol are advised. Complementary techniques, such as those mentioned in the study, should be further researched so that practitioners of various martial arts that involve the gripping strength of the injured hand can be treated.

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Acupuncture and the Opioid Crisis in Colorado

By James Yardley, MAcOM

This information was created for the Acupuncture Association of Colorado by the author for policymakers in Colorado.

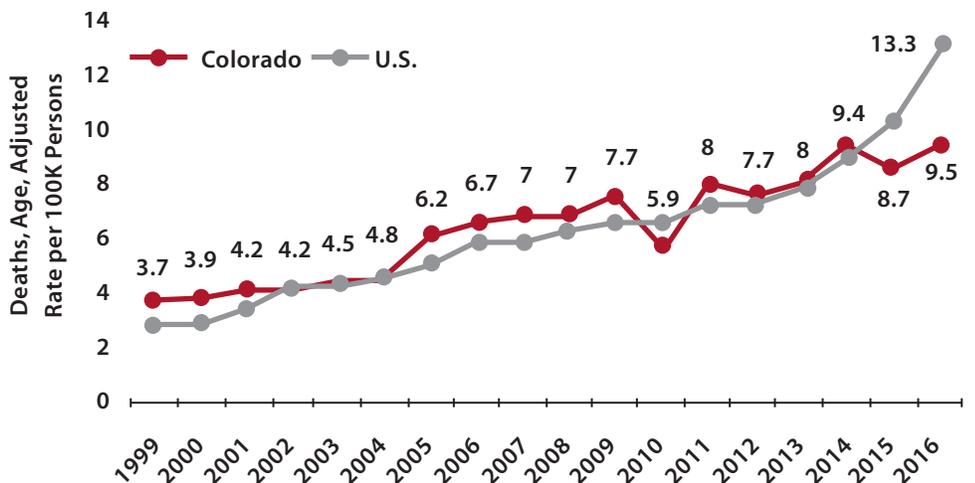
James M. Yardley received his Master's in Acupuncture and Oriental Medicine from the Oregon College of Oriental Medicine in 2019. Previously, he earned a BS in Integrative Health from the Metropolitan State University of Denver and had a fulfilling career in music. A resident of Portland, Oregon, James is passionate about seeking ways that integrative medicine can transform health care for all. He may be reached at Jamesmilesyardley@gmail.com.

Problem

Colorado has a growing opioid crisis on its hands...

- Drug overdose death rates in Colorado continue to increase, fueled by opioid addiction... opioid overdoses “nearly quadrupled from 2.5 deaths per 100,000 population in 1999, to 9.8 in 2017.”¹
- Opioid overdoses take more lives in Colorado than any other type of drug, including alcohol, methamphetamines, heroin and cocaine.¹
- The number of people in treatment for opioid use disorders at state licensed facilities has increased 189% from 2,748 in 2011 to 7,949 admissions in 2016.²
- Heroin-related deaths have nearly tripled in six years: 2011 - 79 deaths, to 2016 - 228 deaths.²

Rate of Opioid-Related Overdose Deaths in Colorado



Source: CDC WONDER

Solution

Acupuncture is effective for pain management...

- “Acupuncture has a clinically relevant effect on chronic pain that persists over time... Referral for acupuncture treatment is a reasonable option for chronic pain patients.”³
- The American College of Physicians Clinical Practice Guidelines strongly recommends acupuncture as a non-pharmacological treatment for acute, subacute, and chronic low back pain.⁴
- Acupuncture resulted in pain relief and better function in low back pain compared with nonsteroidal anti-inflammatory drugs and was associated with a greater likelihood of overall improvement at the end of treatment.⁵
- Evidence supports the use of acupuncture in osteoarthritis by reducing pain, improving mobility and quality of life.^{6,7,8}

Acupuncture's role in recovery management...

- Studies show acupuncture and electroacupuncture significantly reduce patients' postoperative analgesic requirement, reducing the consumption of opioid-like medications by more than 60% following surgery.^{9,10,11}
- Utilizing electroacupuncture is shown to reduce opioid use across a wide range of major and minor surgical procedures.^{12,13,14}
- When acupuncture was incorporated into treatments for pain at a United States Air Force medical center, opioid prescriptions decreased by 45%, muscle relaxants by 34%, NSAIDs by 42%, and benzodiazepines by 14%.¹⁵
- “Patients treated with acupuncture had significantly less pain and used fewer opioid analgesics on Day 1 after surgery compared with usual treatment,” according to meta-analysis from 2016 of 13 studies including 682 patients.¹⁶

Acupuncture also provides opioids—the natural ones...

- Acupuncture works to block pain by activating a variety of bioactive chemicals, including several classes of opioid neuropeptides through peripheral, spinal, and supraspinal mechanisms. Endogenous opioids desensitize peripheral pain receptors and reduce proinflammatory cytokines peripherally and in the spinal cord.^{17,18}

...and can therefore treat opioid addiction itself

- The World Health Organization and the National Institutes of Health have accepted acupuncture as a therapy for drug treatment for over 20 years.
- The World Health Association has approved acupuncture for the treatment of these significant withdrawal symptoms: vomiting, insomnia, emotional upheaval, muscle spasms, sweats.

- The U.S. Center for Substance Abuse Treatment (2007), the United Nations (2006), and the U.S. Department of Defense/Veterans Affairs (2010) have each published best practice guidelines highlighting the value of acupuncture for chemical dependency.¹⁹

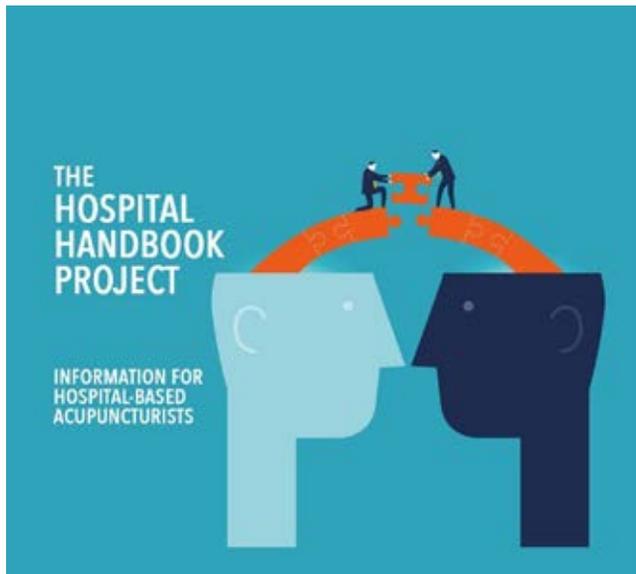
Acknowledgment: The author thanks Beth Howlett, MAcOM, LAc, Mark VanOtterloo, DAOM, LAc, and Jessica Sylvanson, MAcOM, LAc for their guidance and help with this report.

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Dear Editor...

By Megan Kingsley Gale, MSAOM, Dipl OM (NCCAOM)



Dear Editor,

In 2016 I created and now facilitate a wisdom-sharing resource, the *Hospital-Based Practice Handbook Project for Acupuncturists and their Hospital Sponsors (Administrators)*. When hospitals decide to offer new integrative medicine approaches, such as the hiring of licensed acupuncturists, this handbook can serve as a valuable resource to help facilitate a smooth, error-free process.

“Specifically, the *Project* facilitates a clear understanding of how acupuncturists’ procedures and approaches can complement ongoing patient care in each service line.”

The *Hospital-Based Practice Handbook Project for Acupuncturists and their Hospital Sponsors (Administrators)*, i.e., the *Project*, supports this challenging new avenue of employment for acupuncturists (LAcS). The *Project* also enables hospital program managers to learn and share the latest evidence-based practices and research in the integrative medicine field and include the LAcS in each step.

A Resource for Licensed Acupuncturists

More acupuncturists are being hired in more hospitals. This is a good thing. The *Project* is designed to streamline these hiring procedures and promote the integration of acupuncturists into any hospital’s biopsychosocial patient-centered care model.

Specifically, the *Project* facilitates a clear understanding of how acupuncturists’ procedures and approaches can complement ongoing patient care in each service line. This can thereby reduce miscommunication about the hiring of licensed acupuncturists as well as illustrate the value of LAcS as professionals rather than technicians.

The *Project* helps hospitals streamline the hiring of licensed acupuncturists by providing the hiring staff and credentialing team with published standards on hiring and credentialing of them. The *Project* connects users to resources that include basic program frameworks—from standard operating procedures (SOPs) to clinical outcome metrics.

A resource for Acupuncturists’ Program Managers

Whether the goal is to address increased patient demand for integrative health services or to meet Joint Commission, CDC, and HHS/CMS recommendations for non-pharm options for pain management, this resource is an important asset for the champions and change-makers in the healthcare field. It provides documentation standards and templates as well as practical program standards and outcome metrics.

“The *Project* is designed for use by all healthcare professionals, not just licensed acupuncturists. It can help both program managers and LAcS streamline a set of new programs before they are implemented or assist with the move into new areas by connecting colleagues such that everyone can learn from each other’s successes and failures.”

The *Project* is a knowledge-sharing network designed to quickly and successfully implement a cross-section of programs, from new program setup to selection of relevant metrics that track cost savings and patient-centered outcomes. Whether it’s program success in these patient-centered outcomes or improved access to non-pharm pain care, the *Project* provides versatile applications for all hospital programs. It also presents effective models for revenue generation as well as service reimbursement.

The *Project* supports individual program managers as well as their hospital by facilitating connections between other managers who work with integrative health (IH) professionals or run IH programs. This is important because it helps in-house acupuncturists understand the pressures and standards the facility is working toward; for example, it’s handy for developing (or improving) a clinic’s outcome measures to align its metrics with the facility’s larger mission and vision.

The *Project* connects standards of practice in documentation (coding, use of relevant research-validated metrics), compliance, billing and reimbursement models, and research. It also connects user to resources in health policy, thus directly affecting an acupuncturist’s hospital-based practice.

A Resource for All

The *Project* is designed for use by all healthcare professionals, not just licensed acupuncturists. It can help both program managers and LAcS streamline a set of new programs before they are implemented or assist with the move into new areas by connecting colleagues such that everyone can learn from each other’s successes and failures.

The *Project* connects users to relevant published research and program frameworks (from feasibility studies to pragmatic trials). This offers great potential for collaboration in multi-site research projects.

The *Project* hosts discussions of relevant research in the field as well as vetted recommendations for continuing education resources, whether it’s through courses or conferences. Included are both closed group resources for discussion and social support through connections to mentors and existing resources and the beta-testing of new resources.

Project Resources include:

- Email list with newsletter
- Published resources available via the website, blog, public Facebook page, and YouTube channel
- Closed online discussion groups

Welcome to the *Project*!

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CLINICAL PEARLS



The topic selected for this issue is:

How Do You Treat Lyme Disease in Your Clinic?

By Jennifer A. M. Stone,
MSOM, LAc

Jennifer A. M. Stone MSOM, LAc is an assistant research faculty at the Indiana University School of Medicine, Department of Anesthesia and Department of Pediatric Oncology. She has participated in NIH funded research on both animal and human subjects. She serves as Editor In Chief of JASA: *The Journal of The American Society of Acupuncturists* and for 28 years has maintained a clinic, East West Acupuncture in Bloomington, IN. Her IUSM team recently proposed a research study to investigate the immunomodulatory mechanisms, including mesenchymal stem cells, on the effects of acupuncture in patients with postherpetic neuralgia.

Lyme disease is estimated to affect more than 300,000 each year.¹ The diagnosis and treatment of Lyme in the U.S. comes with controversy. Acute onset of the disease follows a bite from an infected deer tick. Though most tick bites manifest with itching and swelling, the Lyme-infected tick bite has a unique rash around it that looks like a bulls-eye. In the first few days, patients will experience high fever, chills, sweats, extreme body aches, swollen lymph nodes, joint pain and swelling, and sometimes Bell's palsy, an asymmetrical facial droop caused by dysfunction of the trigeminal nerve.

Diagnosis

The Center for Disease Control (CDC) currently recommends a two-step process when testing blood for evidence of antibodies against the Lyme disease bacteria *Borrelia burgdorferi*. Both steps can be done using the same blood sample.

The first step uses a testing procedure called "EIA" (enzyme immunoassay) or, rarely, an "IFA" (indirect immunofluorescence assay). If this first step is negative, no further testing of the specimen is recommended. If the first step is positive or indeterminate, the second step should be performed. The second step uses a test called an immunoblot test, commonly, a "Western blot" test. Results are considered positive for Lyme only if the EIA/IFA and the immunoblot are both positive.^{1,2}

Treatment

Antibiotics commonly used for oral treatment include doxycycline, amoxicillin, or cefuroxime axetil. People with certain neurological or cardiac forms of illness may require intravenous treatment with antibiotics such as ceftriaxone or penicillin.³

Although most cases of Lyme disease can be cured with a 2-4 week course of oral antibiotics, patients can sometimes have symptoms of pain, fatigue, or difficulty thinking that linger for more than six months after they complete their antibiotics. This condition is called "Post-Treatment Lyme Disease Syndrome" (PTLDS).

Post-Treatment Lyme Disease Syndrome (PTLDS)

Why some patients experience PTLDS is not known. Some experts believe that the infection can trigger an “auto-immune” response causing symptoms that continue after the infection is gone. Other experts hypothesize that PTLDS results from a persistent but difficult to detect infection. Finally, some believe that the symptoms of PTLDS are due to other causes unrelated to the patient’s *Borrelia burgdorferi* infection.

Though short-term antibiotic treatment is an accepted and proven treatment for early Lyme disease, some doctors are treating PTLDS with long-term antibiotic treatment. Long-term antibiotic treatment for Lyme disease has been associated with serious, sometimes deadly complications. Studies funded by the National Institute for Allergy and Infectious Diseases (NIAID) have found that outcomes are no better for patients who received additional prolonged antibiotic treatment than for patients who received placebo.⁴

“Long-term antibiotic treatment for Lyme disease has been associated with serious, sometimes deadly complications.”

Chinese Medicine

During the acute phase of Lyme disease, acupuncture and Chinese medicine can be used to ease the febrile symptoms as an adjunct to western antibiotic therapy. In treating PTLDS, Chinese medicine as well as acupuncture include treatment modalities that are more suited to managing the multiple symptom cluster of PTLDS, thus making Chinese medicine a valuable option in caring for patients with these difficult conditions.

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Read a different perspective on the treatment of Lyme disease by the founder of the Lyme Research & Healing Center, Greg Lee, LAc in September’s issue of *Acupuncture Today*: <https://www.acupuncturetoday.com/mpacms/at/home.php>



JASA: The Journal of the American Society of Acupuncturists is seeking submissions for the fall 2019 issue’s Clinical Pearl topic: “How Do You Treat Leaky Gut Syndrome in Your Clinic?” Clinical Pearl submissions may be sent to Clinical Pearls Editor Tracy Soltesz at kesrya@gmail.com by September 15, 2019.

Please refer to our website for Author Guidelines and submission information:

<http://www.meridiansjaom.com/author-guidelines.html>

How Do You Treat Lyme Disease in Your Clinic?

By Munleen K. Soni, DSOM, LAc

Munleen Soni is the CEO and sole practitioner for An Xuan Healing in Portland, Oregon, and is affiliated with the National University of Natural Medicine. She also serves as treasurer of the Oregon Association for Acupuncture & Oriental Medicine. After completing an Intensive Medical Gross Anatomy Bootcamp and a year of osteopathic medical school in rural Appalachia, a health crisis led her to pursue her life-long passion to provide palliative, restorative and minimally invasive health care via acupuncture and herbs.

While the diagnostic label of “Lyme disease” relays symptomatic information, it does not translate or correlate to an actual diagnosis within classical Chinese medicine. Typical clinical presentation is categorized by an initial dermal lesion with neuro-muscular complications such as but not limited too joint pain, headaches, fatigue and additional complications that may lead to a sequelae.

Broadly speaking this particular range of signs fall into the realm of *shaoyang*, which is associated with governing the exterior and interior. This is especially pertinent given that Lyme disease originates as an exogenous acute attack with associated chronic, latent presentations. To date only acute cases affecting females ranging in age from 25-70 have been treated.

In terms of climatology, areas associated with *Borrelia burgdorferi* are cold damp environments, which implies the need for a warming and invigorating treatment strategy. With respect to herbal prescriptions, a base formula using the following four warming herbs are utilized: *fuzi*, *xixin*, *gan jiang* and *guizhi*. Together they are invigorating and able to intercept at all depths and regions of the body from the entire vertebral column, interstices, joints, muscles and dermis. In cases where there are elevated levels of ESR or WBC counts indicative of rheumatic activity combined with reported inflammation in joint spaces, *chai hu* is incorporated.

Treatment with acupuncture and moxibustion begins with the scalp and ear needled first to quickly minimize pain and discomfort, followed by the selection of points on channels based on the pulse and facial diagnoses. Emphasis is granted to both *shaoyang* and its pair *jueyin*, immunodefensive *wei* energy that exudates by the *chong mai*, and the Kidneys as they provide the foundation for health.

An example of this would be the following acupuncture points: SP4 and XB5 to access the *chong mai*, LR3, XB6 to SJ5; GB39, GB40, GB34, KI6 (classical location on calcaneum), KI16,

and CV22 (Window of the Sky to facilitate normalizing *wei* energies). In certain cases where there is pronounced deficient Heat or listless energy *miyabi* moxa is added directly onto select points.

Clinically a modification of *gui zhi shao yao zhi mu tang*

has been shown to reverse inflammation, restore range of motion, and prevent the need for corticosteroids and antibiotics. Modifications to attenuate for the actual clinical presentations are utilized to engender the most accurate, biospecific therapeutic innovation. Chronicity results often require at least six months to a year of regular intake of a formula with consistent follow up for acupuncture.

“Broadly speaking this particular range of signs fall into the realm of *shaoyang*, which is associated with governing the exterior and interior. This is especially pertinent given that Lyme disease originates as an exogenous acute attack with associated chronic, latent presentations.”

Examples of this clinical reasoning process:



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How Do You Treat Lyme Disease in Your Clinic?

By Amy Moll, DAOM, LAc, Dipl OM (NCCAOM)

Patients with Lyme disease (*borrelia sp*) and other tick-borne infections often present with dysautonomia, a dysregulation of autonomic nervous system functioning as a result of damage and inflammation inflicted upon neural tissues by the spirochete. The autonomic nervous system includes higher cortical areas of the insular cortex and prefrontal cortex, and the thalamus and hypothalamus as well as key areas in the mesencephalon, pons, and medulla.

Functional neurological examinations of the cranial nerves can provide objective markers of function of these key areas of the midbrain and lower brainstem. Patients may present with hippus—an oscillating constriction and dilation of the pupils in response to light, poor ability to hold gaze on a steady target, intrusions in horizontal and vertical pursuits, deviations of the tongue, poor soft palate movement, and hyper-or hypo gag reflexes.

Patients with Lyme frequently present with elevated resting heart rates in the 90-95 beats per minute (bpm) range. Thirty bpm or greater spikes in heart rate can be observed when they go from supine to standing.

Sign and symptoms of dysautonomia can include poor regulation of body temperature, leading to spontaneous sweating, chills, fevers, and hot flashes. Dysregulation of the heart rate can lead to tachycardia and postural orthostatic tachycardia. Other signs of dysautonomia include frequent dizziness, fatigue, blurry vision, nausea, headaches, chronic low-level anxiety, tingling and numbness that moves around, sleep disorders, immune system imbalances, and chronic pain.

Dysautonomia parallels closely the Chinese medicine concept of a *ying wei* disharmony. *Ying wei* disharmonies lead to imbalances in circadian rhythms and affect circulation to the *yin* Organs. When *wei qi* remains active at night, and *ying* is not allowed to properly circulate, this leads to insomnia, chronic low-level anxiety, and immune imbalances. *Ying wei* disharmonies

also manifest with temperature fluctuations, tachycardia, fevers, dizziness, nausea, digestive imbalances, numbness and tingling, fatigue and headaches.

Patients with *borrelia* infections frequently present with a long list of fluctuating

symptoms and complaints in addition to neurological findings indicative of dysautonomia. Treating a *ying wei* disharmony with the classical formula *gui zhi tang* or its associated formulas can effectively resolve a wide variety of these symptoms by addressing the dysautonomia.

Acupuncture can also effectively address dysautonomia through harmonizing the *ying* and the *wei*. *Wei qi* is circulated through the extraordinary vessels of the *ren*, *du*, and *chong*. The confluence points of LU7, SI3, and SP4 respectively aid in the circulation of *wei qi*. *Wei qi* can be tonified with ST36, UB12, and LU9. *Ying qi* can be nourished through SP4, SP6, and SP21.

The use of entry and exit points also unblock the *ying qi*. Through the integration of neurological examinations, neurophysiology, and the application of acupuncture and Chinese herbs, dysautonomia in *Borrelia* and other tick-born infections can be monitored and effectively treated resulting in improvements in a wide variety of common symptoms and ailments.

“When *wei qi* remains active at night, and *ying* is not allowed to properly circulate, this leads to insomnia, chronic low-level anxiety, and immune imbalances.”

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How Do You Treat Lyme Disease in Your Clinic?

By Amy Mager, DACM, LAc, Dipl OM (NCCAOM) and
Christine Cronin, DAOM, LAc

Amy Mager, MSTCM, DACM, Dipl OM (NCCAOM) received her MSTCM from the American College of Traditional Chinese Medicine at CIIS in 1986 and her DACM from the Pacific College of Oriental Medicine in 2019. Amy is also an ABORM Fellow. She serves as the American Society of Acupuncturists' vice chair and is interim chair of the Acupuncture Society of Massachusetts. Amy specializes in fertility, pregnancy, postpartum, intractable pain and "the intractable and atypical."

Christine Cronin DAOM, LAc is an alumna of Pacific College of Oriental Medicine-San Diego. Currently, Dr. Cronin currently serves as the chair of the Acupuncture Department at this campus. She also is a Board Member at Large for the American Society of Acupuncturists and coordinates the ASA's newsletter.

In some instances, Lyme disease does not present with any of the expected signs and symptoms. During one three week period, for example, three atypical Lyme cases presented at clinic. Recognizing atypical presentation is a crucial first step to successful treatment planning.

The CDC¹ states the following signs and symptoms for Lyme disease: "Fever, chills, headache, fatigue, muscle and joint aches, and swollen lymph nodes. Erythema Migrans (EM) rash (i.e., bullseye rash) only occurs in approximately 70 to 80 percent of infected persons. If the rash appears, it begins at the tick bite site 3-30 days after the tick bite (average is about 7 days)."

"One of the benefits of our profession's training involves asking the 10 questions and watching our patients as well as listening to them. We listen to their voice, their tone, and observe how they conduct themselves."

Although one of the patients had several of these symptoms, these two patients did not have any of these above-listed signs or symptoms:

Patient 1: This 60-year-old female's chief complaint

was unclear thinking. The patient reported that "something is wrong, I just know it and I can't pinpoint it." She kept the tick and showed it to her regular physician who said that because it was not a deer tick there was no point in testing it. I encouraged her to have the tick tested at a local university, which she did. The tick came back positive for Lyme so her physician then agreed to order testing for Lyme and other tick-borne diseases. These came back positive for Lyme and Babesiosis. It is important to remember that even with common Lyme symptoms, other presentations are possible and every patient that is able to save the tick should get it tested.

Patient 2: This 48-year-old male Community Service Agriculture farmer complained of severe knee pain. The patient denied exposure to Lyme because he "always" wears long pants and long shirts while working on his inner city CSA farm. For the past 18 years, his only form of transportation has been by bicycle. After one long bike ride, he felt knee pain for three days while pulling his mom in a device behind the bike and later when playing tennis.

After three days, the knee pain went away, and the next day the patient felt no pain in his knee. The following day, however, the patient was unable to bear weight. The patient's knee was greatly swollen. The swelling and misshapen configuration of the knee told me, "pay attention, this is atypical." I gave an acupuncture treatment to the patient, used liniment on his knee, gave him crutches I had on hand, and urged him to get a Lyme blood test.

After initially rejecting this suggestion, after three days of continued symptoms he called me to inquire more about the test. I urged him again to get tested and he agreed to this. The test came back positive for Lyme. Additionally, the test indicated he had had Lyme for

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continued on page 40



Report on the Society of Acupuncture Research International Conference

By Megan Kingsley Gale, MSAOM, Dipl OM (NCCAOM)

The 19th annual Society of Acupuncture Research Conference¹ was held June 27-29 at the University of Vermont Davis Center, Burlington, Vermont. Established in 1993, SAR membership includes “basic and translational scientists, clinical epidemiologists and trialists, and practicing acupuncturists who engage in research and education from 28 countries.”²

This year’s conference theme, “Acupuncture Research, Health Care Policy, and Community Health...Closing the Loop,” emphasized the goal of acupuncture research as being organized, coherent, and accessible so it may inform by use of evidence-based decision-making. “The goal is to support a reality where integration and cross-pollination can flourish—in both the intradisciplinary sense between various acupuncture stakeholders and the interdisciplinary sense between acupuncture and other health care disciplines.”³

This was my first SAR conference. At the hospital-based practice pre-conference session, I was finally able to meet in person the colleagues I have been working with remotely for years and cheer on my colleagues who were presenting their

“The goal is to support a reality where integration and cross-pollination can flourish—in both the intradisciplinary sense between various acupuncture stakeholders and the interdisciplinary sense between acupuncture and other health care disciplines.”³

work. During each day, there was great sense of comraderie, connections were made, wisdom was shared, and excellent, heartfelt work was presented from many disciplines. The whole conference felt to me like a tipping point—just before hitting critical mass, this butterfly was emerging from its cocoon.

One outstanding presentation, “The Risks and Rewards of Using the Electronic Health Record (EHR) for Research,” was by Jeff Dusek, PhD, director of research at the Connor Integrative Health



SAR Research
Dissemination group.
Photo credit: JASA

JOIN SAR

The Society for Acupuncture Research is dedicated to improving the quality and increasing the awareness of research in acupuncture, herbal therapy and other modalities of Oriental medicine. If you share our values and want to be an active part of SAR's mission, we invite you to become a member and join the global dialogue that ultimately impacts the clinical scope and practice of acupuncture and Oriental medicine. Monthly payment options are available for individual professional members.

Network, University Hospitals, Cleveland, Ohio. Dr. Dusek discussed the ability to obtain detailed, patient-level data via extracts from the electronic health record. While the electronic health record is foremost a clinical tool and not designed for research purposes, using data in the EHR for research is possible, although it necessitates a lot of work.

Dr. Dusek's advice to those interested in this type of research: "Develop a study protocol and get IRB approval. Reach out to the hospital informatics team as you are developing the protocol to make sure that the elements you want are in the EHR. Be prepared to work with the informatics team BEFORE you submit and AFTER you obtain approval to make sure that your specifications document is accurate. The process is iterative! Include a biostatistician on the team! You may need lots of their time. Be patient—these steps can take a great deal of time. Start with a small data extract (1-2 months of data) and test out the concepts before getting to the complicated datasets."

New metrics to consider when measuring our clinical work

Therapeutic alliance was discussed by three impressive researchers: Lisa Conboy, MA, MS, ScD, Vitaly Napadow, PhD, LicAc and Hugh MacPherson, PhD. Dr. Conboy presented "The Development of the Therapeutic Alliance in Acupuncture Treatments of Gulf War Illness (GWI)" with Saadat Bagherigaleh, MD, MAOM, New England School of Acupuncture at MCPHS University.

Dr. Napadow, associate professor at the Harvard Medical School and director at the Center for Integrative Pain Neuroimaging, presented on "neural mechanisms supporting patient/clinician therapeutic alliance during acupuncture." His work showed how the level of electroacupuncture analgesia (pain relief for the patient) is correlated to how much the clinician's face mirrors the patient's face.

Dr. MacPherson, University of York,⁴ presented on "Pragmatic Trial Designs to Identify Specific Effects Beyond Needling and Their Impact," which looks at lifestyle advice. He also discussed the teaching of self-care, which considers the integral aspects

of usual patient care in an acupuncturist's clinical practice. Dr. MacPherson elegantly differentiated the East Asian medicine lifestyle/wellness advice from "nonspecific effects."

For those working to use research to change/inform healthcare policy and coverage of care patients are requesting and need

Arya Nielsen, PhD, Icahn School of Medicine at Mount Sinai, Department of Family Medicine and Community Health, presented on her multi-year work with The Joint Commission (TJC) on nonpharmacological pain relief options officially being recognized as the first line of pain relief care. She stressed that TJC accredited facilities must provide nonpharmacologic options for inpatient pain care.⁵

Lisa Taylor-Swanson, PhD presented "Intersections of Practice, Research, and Policy: Update on Washington State Labor & Industries Coverage of Acupuncture for Injured Workers." Her team's research translated acupuncture for low back pain evidence that resulted in a policy change at Washington State's Department of Labor and Industries to: (1) add licensed

Below from left to right: Jennifer Stone, LAc; Lisa Taylor-Swanson, PhD; and Megan Kingsley Gale, LAc. Photo credit: JASA



acupuncturists to the list of approved provider types within the state workers' comp system and (2) include coverage of acupuncture services for approved claims related to low back pain. Dr. Taylor-Swanson received the Society of Acupuncture Research's Outstanding Clinical Research Presentation Award at the conclusion of the conference.

Laura Ocker, MAcOM, LAc from the Multnomah County Health Department discussed her experience with using research to encourage health policy change for Oregon's Medicaid program. Ben Kligler, MD, MPH, director of the Integrative Health Coordinating Center at the Veterans Health Administration's Office of Patient Centered Care & Cultural Transformation, presented on "Using Acupuncture to Advocate for Evidence-Based Health Care Policy." The VHA has now approved the following integrative health treatment options: acupuncture, *tai chi*, *yoga*, meditation, massage therapy, guided imagery, hypnosis, biofeedback, and chiropractic care.



Above from left to right: LiMing Sing, LAc; Helene Langevin, MD, Director of the National Center for Complementary and Integrative Health at the National Institutes of Health; David Miller, MD, LAc. Photo credit: JASA

How to access more information about this SAR conference

"The Society for Acupuncture Research is a phenomenal year-round resource for research questions; your membership also helps support collaboration between the researchers and practitioners helping to craft the research initiatives that inform the public, regulators, and insurance companies <https://sar.memberclicks.net/>" –Claudia Citkovitz

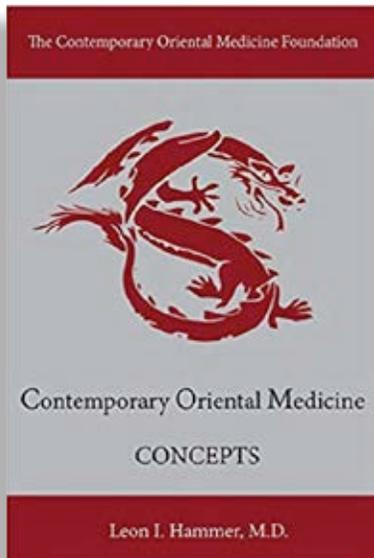
Access more information about the conference and related SAR resources at their website www.acupunctureresearch.org. The next SAR conference held in the U.S. will take place in 2021.

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Megan Kingsley Gale, MSAOM, Dipl OM (NCCAOM) is an integrative health practitioner specializing in East Asian medicine. She has volunteered and worked in hospital practice for over 10 years. Megan is the founder and facilitator of the Hospital-Based Practice Handbook Project for Acupuncturists and their Hospital Sponsors (Administrators). She may be contacted at megankgale@outlook.com. You can learn more about the *Project* at www.thehospitalhandbook.com.

BOOK REVIEW



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“The fundamental ideas of COM are relevant and essential regardless of treatment style, and the information in this book alone is enough to form the basis of a full, thriving, and continually maturing lifelong practice.”

Contemporary Oriental Medicine Concepts by Dr. Leon I. Hammer, MD

Reviewed by Kathryn Nemirovsky, MSOM, LAc

There are books written for the practitioner of Chinese medicine that can and should also be read by Western physicians who wish to understand what our medicine has to offer. Among those, there are some that have the potential to deeply inspire as well as educate.

Dr. Leon Hammer's *Contemporary Oriental Medicine Concepts* is one such book. It will grip the seasoned practitioner wishing to delve deeper and invoke humility in new practitioners upon realizing just how meager a foundation their degree program has bestowed upon them—and for both it will drive home how much more there is to learn in order to practice a medicine that is truly preventative and truly holistic.

Concepts is essentially an encapsulation of Contemporary Oriental Medicine (COM), the synthesis of Dr. Hammer's own life's work as a practitioner of western medicine and his twenty-seven years of study with internationally recognized master of Chinese medicine, Dr. J. F. Shen. Among Dr. Hammer's gifts are the formulation of a medicine that lives and evolves in the present day and a profound understanding of diagnosis and treatment; one that is not currently offered in either acupuncture school or western medical training.

In the spirit of holism, the book is laid out in a somewhat nonlinear fashion. This might present a slight challenge for those expecting a more orthodox textbook presentation, or for those unfamiliar with either Dr. Hammer's work or with Chinese medicine in general. But I believe

the richness of content will be enough to carry most readers, including those introduced to the material for the first time. The fundamental ideas of COM are relevant and essential regardless of treatment style, and the information in this book alone is enough to form the basis of a full, thriving, and continually maturing lifelong practice.

The chapters include (not necessarily in this order and not limited to) an introduction to basic COM terminology and ideas, philosophy, symptoms, etiology, homeostatic strategies, signs and ecology, terrain (innate capacities) and lifestyle, diagnosis and management. Also included are discussions on organ system pathologies, most notably a detailed exploration of liver conditions and corresponding pulse diagnoses.

Readers should be aware that the discussions on pulse in *Concepts* are limited, and those looking for a comprehensive understanding of the Shen-Hammer pulse system should also read Dr. Hammer's second book, *Chinese Pulse Diagnosis, A Contemporary Approach* (or better yet, study the pulse system directly with a qualified instructor). Also included in this book are discussions about important COM concepts such as heart shock, the separation of *yin* and *yang*, and *qi* wild conditions. There is also a section on blocks as well as some discussion on the use of herbal formulas.

The depth Dr. Hammer offers on diagnosis, pathology, and treatment is reflected in the seamlessness of his thinking as both a western physician and a practitioner of Chinese medicine. This is beautifully illustrated in his descriptions of physiology that nod to both western and eastern perspectives simultaneously without favoring or diminishing either one. I have found this particularly useful in clinic as it allows for communication with the patient in a way that has the most potential to affect change. Having been a student of the Shen-Hammer pulse system for many years, I've had countless conversations with patients, for example, about the physiological processes involved in over-exercising, an idea integral to COM but anathema to conventional notions of health.

One of the great strengths of *Concepts* is that it presents COM as an antidote to superficial ideas of "integrative medicine," which ultimately subsume the fundamental tenets of Chinese medicine into a primarily western bioscience model. Indeed, this is one of the most important contributions of Dr. Hammer's work—a reflection not only of a long life exceedingly well lived, but also a life force of unceasing curiosity and striving for a continually greater understanding of what holistic and humanistic medicine really means.

Kathryn Nemirovsky, MSOM, LAc holds a Master of Oriental Medicine degree from the New York College of Health Professions. Always seeking to enhance her knowledge, Kathryn completed six years of post-graduate studies with Lonny Jarrett, which included training in Contemporary Chinese Pulse Diagnosis, also known as the Shen-Hammer system. Kathryn practices acupuncture and herbal medicine in Crofton and Columbia, Maryland. She served as board secretary for the Maryland Acupuncture Society from 2016-2019.

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Sp – 1 隱白 *Yin Bai*, Hidden Clarity

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

Please see bios at end of the article.

The pictures are 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 © (Chmielnick, Ayal, Maimon). Illustration by painter Mrs. Martyna “Matti” Janik.

Explanation of the picture:

Sp – 1 *Yin bai* is a *jing-well* point, a Wood point on the Spleen meridian, and one of the *SunSiMiao* Ghost Points. All of these functions are shown on the picture. The ghost behind the tree and the skeletal buried in ground represent this hidden nature of the point. The well and tree each signify that this is a Wood point and the flow of the *qi* here is characterized by the well.

Etymologically, the Spleen is connected to a servant girl who is humbly doing her job without any wish of admiration. Her pure white dress under an ugly brown coat symbolizes hidden (white) purity.

As a *Jing-Well* point, Sp-1 has strong effect on the other end of meridian, causing an opening of a chest, which is symbolized by the laced neckline of the girl’s white dress.

This point also has a gynecological reference. The woman is warming the food, which expresses the production and purification of blood. The red blood-stained cloth laying against the stone hints to the point ability’s to stop bleeding.

Sp – 1 *Yin bai* is the source of the *ChongMai*—the woman is standing stands at the entry of a hidden deep cave. This cave also represents the hidden passage of the moving into the *TaiYin* from *TaiYang*.

Characters of the Name:

隱 – *Yin* – a hill, work done with two hands, concealment, **hidden**, mysterious, secret

白 – *Bai* – white, **clear**, obvious, common. Etymologically this evokes a symbol of a pure white cotton ball or a full moon rising above the horizon—symbol of *TaiYin*

Meaning of the Name:

Hidden Clarity

Clarity mentioned in the name can be understood in several ways. It involves the relation of the point to the movement of *qi* and its relation to the mind. Clear *yang qi* is passing from the Stomach channel to the Spleen channel, from *yang* to *yin*. This movement thus relates to the point's effect on *qi*. The dynamic of movement from Stomach *qi* to Spleen also has an effect on *yin* aspect of the *shen*, which is connected to the Spleen, therefore influencing clarity of the mind.

Stomach channel, which is active before the Spleen in the diurnal cycle of *qi* circulation, brings bright *yang* energy downwards and inwards to the **hidden** realm of *yin*. The last three points on the Stomach channel reflect the process of passing the energy into the Spleen channel.

Sp-1 begins the transformation of this powerful *yang* into nourishing *yin*, i.e., matter. In this point bright yang energy is concealed in *yin* still full of *yang* movement, therefore the point indicates internal excesses of *yang* or Heat, especially effecting the blood vessels, which are under the domain of the spleen there for treating symptoms such as uterine bleeding or hemorrhoids. Moreover, the name reflects the influence of Sp-1 – the *jing-well* point on the *Yin* Earth channel of the Spleen – on the *yi* aspect of *shen*, which results in clarity of thoughts and the mind in general.

Other names:

陰 白 – *YinBai* – Clear *yin*

鬼眼 – *GuiYan* – Ghost (in the) Eye This name shows the presence of Ghosts when they cause sudden hysteric or panic attacks with wide open eyes. The eyes are so wide open that one can see white sclera that surrounds the iris, which is normally hidden, or the eye is open so wide that it covers/hides the whiteness of the sclera.

Another possibility is that the eyes are reflecting a very strange gaze, like seeing a ghost.

Main Actions and Indications:

1. Sp-1 is a *jing-well* point and the first point of the channel

1.1 The flow of *qi* proceeds with the digested *yang* and *guqi* from the *YangMing* –Stomach channel to the Spleen.

Qi circulates in the body in cycles. The diurnal cycle symbolically describes metabolic changes in the body. Here the *yang qi* from the *YangMing* channels enters the realm of *yin* but *yang* movement is still strong. Therefore, this point can treat *yang* and Heat and is used in cases of *yang* or Heat associated with internal stagnation and excesses, such as uterine bleeding, hemorrhoids, blood in stool or urine, febrile diseases with bleeding, nosebleed and so on. The same action enables this point to open skin pores and induce sweating in patients with high fever.

This action of *Yang/heat* management allows Sp-1 also to calm the Heart and *shen*. As with many other *jing-well* points, this point is also used to restore consciousness.

1.2 TMM channel originates at Sp-1

Sp-1, as the point where TMM channel starts, is used to treat all sinew problems alongside this channel, for example, pain, swellings, or itching. TMM channel binds at the ribs and spreads in the chest, which further explains the action of opening or unbinding the chest performed by Sp-1.

2. Sp-1 is the Wood point

Wood phase is controlling the Earth phase, which means it gives the Earth proper structure, direction and movement. Activity of Wood movement prevents stagnations in Earth.

Sp-1, as a Wood point, is very dynamic in nature. It speeds up metabolism and prevents stagnations, therefore, this point is widely used in different digestion problems, such as abdominal distension, no desire to eat or drink, vomiting, diarrhea and so on.

Sp-1 is a very effective point in stopping bleeding that results from both excess and deficiency.

3. Sp-1 is the root of *ChongMai*

The leg branch of *ChongMai* channel originates from St-30 and flows down the leg through St-36, St-37, St-39 to the foot. It ends at both Liv-1 and Sp-1. The connection of Sp-1 and *ChongMai* further explains its influence on the Blood, blood vessel and especially the uterus.

4. Sp-1 is one of the *SunSiMiao* Ghost points

and indicates its potential to treat deep-seated traumas and gynecological problems rooted in trauma.

Yair Maimon, DOM, PhD, Ac

Dr. Maimon heads the Tal Integrative Cancer Research Center, Institute of Oncology-Sheba Academic Hospital, Tel Hashomer, Israel. He serves as the president of the International Congress of Chinese Medicine in Israel (ICCM) and the head of the Refuot Integrative Medicine Center. With over 30 years of clinical, academic, and research experience in the field of integrative and Chinese medicine, Dr. Maimon combines scientific research with the inspiration from a deep understanding of Chinese medicine. He has been a keynote speaker for numerous congresses and TCM postgraduate courses. Dr. Maimon is the founder and director of a new innovative eLearning academy, the TCM Academy of Integrative Medicine, www.tcm.ac.

Bartosz Chmielnicki, MD

Bartosz Chmielnicki is a medical doctor who has been practicing and teaching acupuncture since 2004. In 2008 he established the Compleo-TCM clinic in Katowice, Poland, and soon after he opened the Academy of Acupuncture there. Dr. Chmielnicki heads the ACUART International School of Classical Acupuncture, www.acuart.pl. He teaches at many international conferences as well as in schools in Poland, Germany, Czech Republic, and Israel.



You can watch a free video from TCM Academy on the anatomical identity of the spleen in Chinese Medicine:

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at least six months and had been exposed to Lyme previously. His wife reported to me she removed ticks from him every day!

The patient's physician prescribed antibiotics, and I affirmed that this treatment course could also help reduce the possibility of his developing long term neurological consequences of Lyme's disease. The patient felt significantly better within 48 hours of starting the antibiotics, and within 72 hours he no longer needed crutches and was bearing weight normally.

One of the benefits of our profession's training involves asking the 10 questions and watching our patients as well as listening to them. We listen to their voice, their tone, and observe how they conduct themselves. To diagnose, we take the pulse, look at the eyes and palpate the channels. It is easy to close the aperture of the lens we look through, but to best serve our patients, we can also widen that aperture and pay attention. Seeing beyond the chief complaint within the context of our traditional Chinese medicine diagnostic training by, for example, recognizing atypical Lyme disease presentation, can start a patient on the correct road to recovery.

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