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The effects of short term Traditional Acupuncture and Oriental Medicine intervention on long term PTSD and Depression

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Abstract

Purpose:
To support the healing of Post Traumatic Stress Disorder and Depression. .

Background:
Western Medicine thus far has had little success with the treatment of Post Traumatic Stress Disorder (PTSD). Acupuncture appears to have a reasonable success rate in treatment of PTSD, but most cases are not clear–cut. This is largely due to complicated life situations and concomitant heath issues. The population as a whole also has a relatively high rate of non-compliance.

Methods:
Three subjects who had previously been formally diagnosed with PTSD and Depression by psychiatrist or clinical psychologist were chosen. They received 60-minute acupuncture treatments twice weekly for a total of 16 treatments, including herbal prescriptions. Patients were assessed at consenting and prior to first treatment to create a clear baseline, then briefly at the beginning of each session using International Personality Item Pool (IPIP), Arizona Integrative Outcome Scale, Visual Analogue Scale (AIOS-VAS), The Tellagen Absorption Scale (Absorption), Goldberg Depression Questionnaire, PTSD Checklist – Civilian Version (PCL-C), GAD -7, Marlowe-Crowne,

Positive State of Mind Scale, Profile of Mood States (POMS), Hassles and Uplifts Scale, and Sense of Coherence.

Results:
Significant shifts in symptoms were seen starting in week 5 of treatments. This held true across patients with different sets of symptoms and despite issues in number of visit compliance where one participant missed one visit and a second participant missed three visits. The reduction in PCL-C scores showed an average of 18 points over the 8 weeks. All subjects moved from the severe depression rating to the mild - moderate.

Conclusion:
Traditional Chinese Medicine (TCM) treatment was effective at treating both PTSD and accompanying symptoms. Limitations include small sample size, lack of long-term follow-up, and inability to compare specific treatments, due to individual differentiation in Chinese medical diagnosis. Larger trials with follow-up and comparisons to other overall treatments would be needed to confirm the promise shown by acupuncture in this pilot study for treatment of a complicated mixture of psychological and physiological issues.

Keywords: Acupuncture, PTSD, Depressions, Insomnia, Anxiety, Oriental Medicine, EFT

Introduction

Research is a key component in the development of every health care provider's skills. Historically, this has been what has moved healthcare practice forward in providing support and treatment for the ills of humanity. Chronic illness is a significant issue in healthcare today and the costs associated with chronic illness and chronic care are significant. Acupuncture has a history of treating chronic illness successfully and cost effectively (Cummings, 2009, Furlan, 2010, Hinman, 2014). Supporting research within the acupuncture community is a key component in promoting improved quality of life for humanity and in continuing to develop methods to successfully address health care issues.

This research project was developed as a result of seeing the high rate of depression and post traumatic stress disorder which occurs in our urban populations. This, combined with the high numbers of veterans who are returning from the Middle Eastern conflicts and committing suicide at a rate of approximately 22 per day (Medical Xpress, 2015), showed that both groups suffer from an overall loss of quality of life. Unfortunately the long term help of western conventional medical treatment is still unclear (Steinert, C., et al., 2015).

Long-term depression often is comorbid with post traumatic stress disorder and has an equally poor recovery rate and a high rate of recidivism (Uplift Program, 2015). The goal of this case study series was to explore possible customized treatment options to support health and healing in this vulnerable population.

Background

Post Traumatic Stress Disorder (PTSD) was first officially defined in 1980 in the DSM- III. It is a layered issue in terms of both physiological and psychological effects. There has been a considerable amount of research done on PTSD in the last ten years with over 500 research references found in the National Library of Science data base, but so far traditional Western Medicine has failed to find a cure. Instead it has focused primarily on drugging individuals so they react to situations in daily life which trigger symptoms. This does not clear the underlying residuals from their traumas.

This lack of a cure is equally true for those experiencing severe chronic depression (NIMH, 2015) where antidepressants work for 35 to 45% of the depressed population, while more recent figures suggest as low as 30%. Antidepressants, particularly SSRIs, work only as well (or less) than placebos. (Uplift Program, 2015). NIMH states 16 weeks of therapy has a 46% remission rate with medication, and a 47% relapse rate within 12 months (NIMH, 2015). Acupuncture has a long history of successfully treating chronic health issues (Cummings, 2009, Furlan, 2010, Hinman, 2014, Linde, 2009, Manheimer, 2010, Vickers, 2012, Vickers, 2014), as well as influencing mental/emotional problems. despite cultural avoidance of any mention of mental health issues. (Hopton, 2014). As such it was a reasonable step to explore TCM's impact on new and changing mental health issues.

Efforts to address and resolve the underlying issues are being developed in many programs across the country such at the "Wounded Warrior Project" (Wounded Warrior Project, 2015). Most interventions provided today still focus on Cognitive Behavioral Therapy (CBT), which is a form of talk therapy; Exposure Therapy (ET) McLean, C. P., et al., 2022); or Eye Movement Desensitization and Reprocessing (EMDR) (Mayo Clinic, 2015).

> "To be diagnosed with PTSD, a person must have all of the following for at least 1 month: at least one re-experiencing symptom, at least three avoidance symptoms, at least two hyper-arousal symptoms, symptoms that make it hard to go about daily life, go to school or work, be with friends, and take care of important tasks. PTSD is often accompanied by depression, substance abuse, or one or more of the other anxiety disorders." (National Institutes of Mental Health, 2015)

Western treatment has been equally unsuccessful with the treatment of chronic depression, though it has reasonable success with acute depression. Major depression is currently defined as:

> "Major depression: severe symptoms that interfere with your ability to work, sleep, study, eat, and enjoy life. An episode can occur only once in a person's lifetime, but more often, a person has several episodes. People with depressive illnesses do not all experience the same symptoms. The severity, frequency, and duration of symptoms vary depending on the individual and his or her particular illness. Signs and symptoms include: Persistent sad, anxious, or "empty" feelings, feelings of hopelessness or pessimism, feelings of guilt, worthlessness, or helplessness, irritability, restlessness, loss of interest in activities or hobbies once pleasurable, including sex, fatigue and decreased energy, difficulty concentrating, remembering details, and making decisions, insomnia, early-morning wakefulness, or excessive sleeping, overeating, or appetite loss, thoughts of suicide, suicide attempts, aches or pains, headaches, cramps, or digestive problems that do not ease even with treatment." (National Institutes of Mental Health, 2015)

Traditional Chinese Medicine (TCM) allows us to address chronic issues from the strength of a 3000-year history, and from a rich and differing perspective than standard western medicine. This research was designed around using a standardized western diagnosis of PTSD and severe depression. There is no corresponding single TCM pattern that matches the western diagnosis. However, there are trends in diagnosis which apply to this area of western diagnosis such as Liver Yang Rising, as both are defined by a constellation of symptoms.

One of the most commonly diagnosed Traditional Chinese Medicine (TCM) patterns for PTSD is *Liver Qi Stagnation*. This covers a number of the acute symptoms, such as emotional disturbance and insomnia, as well as some of the underlying patterns. Based on this research, this TCM diagnosis appears to be more of a secondary pattern and not the underlying cause. Heart Shen disturbance, caused by heat or a constitutional deficiency, is also commonly referenced in the literature (Kim, 2013). While Heart Shen is definitely an issue, as the Heart feels emotions and PTSD has a lot of emotional components, within this study that did not appear to be the core issue for any of the participants.

Purpose

The purpose of this research is to explore the possibility of supporting the healing of Post Traumatic Stress Disorder and long term Depression in urban and veteran populations, using Traditional Chinese Medicine.

Acupuncture

Current information now maps the meridian system as overlapping parts of the lymphatic system (Ahn et al., 2005; Feinstein, 2010). The concept of the release of "Qi," or static bio-electric overcharge on an area of the lymphatic system is consistent with the evidence that the body has a variety of electro-dermal potentials across its surface (Becker & Selden, 1985, Flick, 2004) and that acupuncture points are strategic

conductors of electromagnetic signals (Ahn et al., 2005, Feinstein, 2010, Lee at al., 2009).

The National Institute of Health Consensus Statement on Acupuncture provides a succinct summary of the gradually growing acceptance of acupuncture in the U.S.:

> "Acupuncture as a therapeutic intervention is widely practiced in the United States. While there have been many studies of its potential usefulness, many of these studies provide equivocal results because of design, sample size, and other factors. The issue is further complicated by inherent difficulties in the use of appropriate controls, such as placebos and sham acupuncture groups. However, promising results have emerged, for example, showing efficacy of acupuncture in adult postoperative and chemotherapy nausea and vomiting and in postoperative dental pain. There are other situations such as addiction, stroke rehabilitation, headache, menstrual cramps, tennis elbow, fibromyalgia, myofascial pain, osteoarthritis, low back pain, carpal tunnel syndrome, and asthma, in which acupuncture may be useful as an adjunct treatment or an acceptable alternative or be included in a comprehensive management program. Further research is likely to uncover additional areas where acupuncture interventions will be useful."

Qi Gong and Meditation was also used. Qi Gong is defined as "an ancient Chinese healing art involving meditation, controlled breathing, and movement exercises", (http://www.merriam-webster.com/dictionary/qigong), and Meditation is defined as "the act or process of spending time in quiet thought" (http://www.merriam-webster.com/dictionary/meditation).

Current research regarding acupuncture and PTSD is primarily focused on refugee populations and the military community. However, the quality of reports is fairly diverse, as is shown in the comparison between various careful reviews of the literature. For instance, Lee, et al. (2013) presents a meta-analysis of 52 out of1480 studies focused on trauma spectrum responses to acupuncture treatments that met strict research criteria. , Lee concludes that "acupuncture appears to be effective for headache. And although more research is needed acupuncture appears to be effective for anxiety, sleep disturbances, depression and chronic pain." In contrast, Kim, et al. (2013), were much more narrowly focused and detailed in their analysis. They did a systematic review of randomized controlled clinical trials or prospective clinical trials and of 136 only 6 met their criteria. They concluded that "acupuncture with moxibustion vs. SSRI's favored acupuncture with moxibustion." Further, recent studies further support the efficacy of acupuncture for treatment of PTSD. Engel et al., (2014) demonstrated positive results, though with a small sample size of 55 subjects, with a 12 week intervention. Hollifield et al., (2007), showed a significant effect of acupuncture ($p < 0.01$) in the PTSD group and also showed improvement in anxiety, depression, and sleep issues. Sniezek et al, (2013) found significant differences between acupuncture for depression and at least one control

group in all six trials they reviewed. In addition, data showed continuing areas of secondary improvement. Overall "results on depression were promising". Wang et al., (2014) showed $p < 0.05$ on PTSD and depression for acupuncture, with SSRI compared to SSRI's only. Spackman et al., (2014) showed that acupuncture for depression was a cost effective method of improving overall quality of life, as contrasted to both counseling and usual care. Arvidsdotter et al., (2013) showed an improvement over conventional treatment for subjects with both anxiety and depression, though integrative therapy appeared to be equally as strong.

McPherson et al., (2013), shows that self-care strategies can contribute to treatment of PTSD. A survey by Feinstein (2010) showed that a variety of Energy Psychology tapping techniques on acupuncture points were successful interventions for treatment of PTSD. Folkes et al, (2002) showed similar results with Thought Field Therapy, a specific Energy Psychology method. Based on these findings, a decision was made to include Emotional Freedom Techniques, which involves tapping on acupuncture points while reciting positive affirmations (one of the Energy Psychology methods), as a self-management technique for participants to use between regular acupuncture sessions in this study.

Participants

This study was a sample of convenience based on who fit the parameters of the study and sought treatment at the university clinic. All three subjects involved in this study were in the 20% of people who experience long-term depression along with their PTSD. None have bipolar disorder, none were members of protected populations, and all expressed interest when the study was described. In this group of three cases studies, each participant received both acupuncture twice weekly and herbs for a period of eight weeks.

Methods

This case study series looked at three typical PTSD sufferers, all of whom also had a western medical diagnosis of comorbid long-term severe depression, and at the effects of both acupuncture and herbs on their symptoms. Meditation and Qi Gong were also be utilized, and two of the participants were provided with EFT tapping techniques to help interrupt their patterned responses to stress producing PTSD type reactions in between treatments. Despite specific differences in treatments, due to differences in presentation, the overall architecture of the treatments remained the same.

All participants received twice weekly sessions which included an initial intake of two hours and subsequent sessions of approximately one hour. All participants were needled at each session and herbs were assessed and given as necessary for the individual. Changes were made on individual herbs in formula prescribed over the course of the 8 weeks for each individual. Patients were assessed at consenting and prior to first treatment to create a clear baseline, then briefly at each session and after the final treatment.

Case one and two already had skills in Qi Gong and meditation. They were asked to continue current practices. Case three had no history of training in Qi Gong or meditation and was provided handouts detailing 6 basic Qi Gong exercises. In week 4 case one and two were asked to add Emotional Freedom Technique (EFT) (Appendix E) on an as needed basis between sessions to support continued clearing and sense of life control. Case 3 was determined not to be stable enough at that point. Questionnaires were administered to determine the success of the intervention at the start of every session.

Materials

Materials for this study included:

Needles: Spring 10 20 x 30
20 x 40
18 x 30
16 x 30
Lancets (used to prick the skin rather than needling)

Herbs:

An Mien Formula
Blood Palace Formula
Chai Hu Shu Gan Wan
Earth Harmonizing Formula
Er Chen Wan
Gan Cao granuals
Ginseng and Longan
Gan Mao Ling
Hawthorne and Fennel
Heavenly Emperor Formula
Ping Wei Wan
Yin Chiao Formula
Yunan Pai Yao

Questionnaires:

The following questionnaires were administered as part of the research: International Personality Item Pool (IPIP), The Telegen Absorption Scale, Goldberg Depression Questionnaire, Demographics Questionnaire, Generalized Anxiety Disorder (GAD-7), and Marlow-Crowne.

Schedule of administration of relevant questionnaires:

Week 1.1 IPIP, PCL-C, Marlowe-Crowne, Telegen Absorption, Goldberg Depression, GAD- 7

Week 4.2 IPIP, Goldberg Depression, GAD- 7, PCL-C

Week 8.2 IPIP, PCL-C, Marlowe-Crowne, Telegen Absorption, Goldberg Depression, GAD- 7

Case Study One

Subject 1 was a male, aged 49, and successful in a professional setting. He had been diagnosed with chronic severe depression for over 20 years, and PTSD within the previous few months. His primary complaint when he began participating in the study was anxiety, which he stated was at a medium level, along with muscle spasms of his neck, shoulders, and the corners of his eyes. His tongue was pale, with a thin white and wet coating, teeth marks, and some raised patches in the ST area. His pulse on the left was tight, and on the right was slippery. He was diagnosed with Phlegm-damp (most clearly shown by thick mucus in the Sinuses) and SP Qi xu (depleted charge in the Spleen). Given that this individual had not previously had acupuncture, SP 6, SP 9, ST 40, PC 6, Ren 6, and SJ 3 were chosen.

On his second treatment visit he returned with the addition of digestive issues, primarily frequent bowel movements. The points were simplified, heat clearing was added, as his pulse had become rapid, and the HT area on his tongue was red, so a few points were added for that. Ginseng and Longan Formula by Golden Flower (GF) was also prescribed. He had an upper respiratory infection during treatment week 3, for which Gan Mao Ling was initially prescribed, and shifted to Yin Qiao when it lasted beyond seven days. Beginning the third week of treatment he also developed problems with fatigue, and stated his energy level was 7/10. At that point the herbal prescription was changed to An Mien Formula. The fourth week the An Mien had proven to be less helpful per his description to his previously slowly improving condition so he was switched back to Ginseng and Longan. In the sixth week he mentioned that the low energy was primarily an issue between 3 and 5pm, and that this was especially the case if he had worked out that morning. Chief Complaints of anxiety and fatigue continued to week seven and eight, with some general improvement. Subject stated that this time of year was usually the worst for his anxiety, and that he felt there was an improvement over previous years. The final set of points chosen were ST 36, SP 6, GB 20, LI 4, LV 3, Ren 17, SP 9, PC 6.

Case Study Two

Subject 2 was a 58 year old female, who was also successful in a professional setting. She had been diagnosed with chronic severe depression and PTSD over 20 years earlier. She originally stated that she was disoriented and dizzy, and that it was likely due to lack of sleep. Her tongue was pale-red with a thick dry coat, swollen sides, and a crack in the ST area leading to the HT. Her pulses were thin on the left and slippery on the right. She was diagnosed with GB overacting on SP. This primarily effects how metabolism is taking place. It disrupts metabolism. There are also emotional and hormonal effects. The points used were SP 6, GB 41, SJ 5, Ren 15, Du 20, and LI 11. The second visit in the first week she reported that her flashbacks had slowed and that she had “memories coming up”. She also had nightmares and esophageal reflux, though the reflux

had improved some. Her tongue had developed peeling in the back, a red tip, and a yellow color to the coat, and her pulse had become rapid. At that point she was prescribed Chai Hu Shu Gan Wan by Plum Flower (PF) and Earth-Harmonizing by GF, and Ren 15 was changed for Ren 17. Two weeks later Ping Wei Wan by PF was added. She continued in this general trend, improving, with minor alterations and changes made to the points throughout. By week seven, points GB 41 for GB 40, PC 6 for SJ 5, Ren 17 for Ren 4 were selected, as her body stopped reacting as well to the original points.

Case Study Three

Subject 3 was a 52 year old man, also successful in a professional setting. He had been diagnosed with depression and PTSD for over 20 years. His chief complaint was breathing issues, diagnosed by his physician as COPD, including thick yellow/green mucus, flashbacks, and grief. His tongue was red with no coat, though he could not remember if he had brushed his tongue that morning. The tongue also had horizontal cracks and was narrowed in the LU and HT areas. His pulse was weak on the left, and thin, slippery, and deep in all positions. He was diagnosed with LU Qi xu, LU Yin xu, and Phlegm obstructing. LU Qi xu refers to the lack of charge on the lungs relating to his breathing problems. LU Yin xu refers to the lack of proper moistening of the lungs, and appropriate dissemination of bodily fluids. This also shows up as heat, which aids in the transformation of pathogenic fluids into Phlegm. This Phlegm then created blockages in his lungs, increasing the breathing problems. The points used were LI 11, Ren 17, LU 7, LU 10, LU 9, SP 6, KD 3, ST 36 on the left, and ST 40 on the right. Two days later he reported that he was not sleeping well, and that he had overall body pain whenever he first started to move his body. This included waking, sitting and standing. He also said that the phlegm was somewhat better. His tongue had developed some raised sections in the ST area, and his pulse was leather on the right and deep and thin on the left. The points were changed to An Mien, LV 3, LU 9, ST 40, HT 7, LI 11.

The second week, he reported no change, was diagnosed with LU Yin xu with Phlegm, and Qi and Blood Stagnation. The Qi and Blood Stagnation was specifically relating to the pain previously mentioned. The points were changed again to Du 16, LI 4, LV 3, LU 9, ST 40, LI 11, Ren 14. The third week the phlegm had decreased and the color had gotten less green but he was still experiencing difficulty breathing and was coughing up large amounts of phlegm. His chest x-ray requested by a local physician showed that his chest was clear. At that point he was diagnosed with LU Qi xu, Phlegm-heat, and LV Qi Stagnation. In Chinese Medicine the LV is in charge of making sure that everything gets where it is supposed to be. When the Qi is stagnant that isn't happening. The points were changed slightly to LI 11, LV 2- 3, LI 4, LU 7, ST 40, KD 7, SP 6, and Pricking to bleed LU 11 on the left. The fourth week the phlegm continued to improve and Pricking to bleed HT 9 on the left was added, as was alternating between LU 1 and Ren 17, and Heavenly Emperor's Formula by GF was prescribed. The inclusion of HT 9 continued to be alternated, as did the side for LU 11 for the next two weeks, then both were included in every treatment, alternating sides.

He started to improve much more quickly at that point, both in terms of the phlegm and the sleep. In week seven Er Chen Wan by GF was added and HT 9 was removed, as sleep was no longer a chief complaint. In week eight he continued to improve until the last treatment, where he stated he had been smoking cigars in the last week. His tongue was pale-red with a thin coat, though it was stained by a cough drop. It still had raised sections in the ST area, horizontal cracks, and narrowed in the LU and HT areas. There was also a dip in the tip of his tongue. His pulse was slippery, slightly tight, and slightly rapid in all positions. The points chosen were LU 7, Ren 17, ST 40, LI 11, LU 6, SP 6, LV 2-3, and Pricking to bleed LU 11 on the left.

Summary of Case Studies

All three cases showed consistent improvements when the presenting complaint was directly addressed. In all of these cases, where there are comorbid issues, addressing the direct needs of the patient rather than the western diagnosis, as would be done in western medicine, showed a more direct benefit to the individual. Distinct improvement was made in significant areas of discomfort because they were directly addressed and not suppressed. It should be made clear that in order to treat depression and PTSD, a more complete and traditional understanding of the application of acupuncture and herbs is a necessary skill of the practitioner. It is important to note the frequent change of needling patterns and herbs in the treatment process in each of these cases in the study, as practitioners with limited training and standardized diagnosis skills should not be encouraged to treat individuals in these categories. Significant damage to the patients can occur in this very vulnerable population.

Results

Significant shifts in all symptoms were seen in all three cases starting in week 5 of treatments. This held true across patients with different sets of symptoms and despite issues in compliance, mostly shown as missed appointments. Key findings were a reduction in PCL-C scores on an average of 18 points over the 8 weeks. All subjects moved from the severe depression rating to the mild-moderate. The Tellegen Absorption Scale results show in all participants' scores were in the average range for absorption and hypnotizeability at the end of the study. The Marlow-Crowne results show that all participants began the study in the average range for politically correct responses and became less politically correct in their responses over the course of treatment.

Goldberg Depression Scale Interpretation:

- 0-9 : No depression
- 10-17: Mildly depressed
- 18-21: Borderline depression
- 23-35: Mild-moderate depressed
- 36-53: Moderate-severe depressed

Table 1: *Goldberg Depression Scale total scores*

	N	Mean	SD	Range
Baseline	3	32.7	11.0	22-44
Week 1	3	41.5	6.4	37-46
Week 4	3	26.7	18.0	9-45
Week 8	3	15.0	5.7	11-19

General Anxiety Disorder (GAD-7) Interpretation:

- 5 : Mild Depression
- 10 Moderate Depression
- ≥15 Severe Depression

Table 2: GAD-7 total scores

	N	Mean	SD	Range
Baseline	3	10.3	3.1	7-13
Week 1	3	14.0	2.8	12-16
Week 4	3	10.0	6.1	3-14
Week 8	3	6	2.8	4-8

PCL - C

17 Item 5-factor Likert scale of personality dimensions

Interpretation:

- 3–5 Moderately as symptomatic and responses1–2 below Moderately as non-symptomatic, then use the following DSM criteria for a diagnosis:
- Symptomatic response to at least 1 “B” item (Questions 1–5),
- Symptomatic response to at least 3 “C” items (Questions 6–12), and
- Symptomatic response to at least 2 “D” items (Questions 13–17)

Table 3: PCL-C total scores

	N	Mean	SD	Range
Baseline	3	45.67	24.38	18-64
Week 1	3	51.33	20.6	28-67
Week 4	3	42.33	19.4	20-55
Week 8	3	33.33	11.6	20-41

Extended analysis of results within the individual answers to each of the questions by case on the PCL-C showed improvement in the area of chief complaint in each case study.

IPIP Scale

50-items instrument with 5 subscales: (1) Extraversion, (2) Agreeableness, (3) Conscientiousness, (4) Emotional Stability, or (5) Intellect/Imagination

Total score ranges from 50 – 250

Table 4: *IPIP total and subscale scores*

		N	Mean	SD	Range
Baseline	Total	3	106	8	102-115
	Extraversion		23	3	20-25
	Agreebleness		22	8	13-29
	Conscientiousness		21	1	20-22
	Emotional Stability		20	9	12-29
	Intellect/Imagination		19	8	13-28
Week 1	Total	3	118	22	101-143
	Extraversion		22	8	13-27
	Agreebleness		25	6	20-32
	Conscientiousness		24	4	20-27
	Emotional Stability		22	7	15-29
	Intellect/Imagination		23	7	15-27
Week 4	Total	3	117	16	103-134
	Extraversion		24	8	15-30
	Agreebleness		21	5	17-27
	Conscientiousness		28	6	22-34
	Emotional Stability		23	10	12-32
	Intellect/Imagination		19	7	14-27

Tellegen Absorption Scale

- 34 items
- Total score ranges from 0 to 34 (higher score indicates higher level of absorption)

Table 5: *Tellegen Absorption Scale total scores*

	N	Mean	SD	Range
Baseline	3	21.8	3.6	19-27
Week 1	3	23.5	6.6	16-30
Week 8	3	16.5	7.8	11-22

Marlowe-Crowne Scale
33 items

Table 6: *Marlowe-Crowne Scale total scores*

	N	Mean	SD	Range
Baseline	3	17.3	2.3	16-20
Week 1	3	16.7	2.1	15-19
Week 8	3	15.7	2.3	13-17

Discussion

There were two very significant findings in this series of single case studies. The first of these findings was a drop in the scores on the PCL-C of an average of 18 points per participant. This cut by one third to one half the original scores. Norming on this instrument suggest changes between 5- 8 points over a substantially longer period primarily with use with cognitive behavioral treatment applications (Weathers et al., 1993).

The second of these findings was a drop in the scores on the Goldberg Depression Index from severe depression to mild/moderate in 8 weeks. In severe long term depression remission is possible but is not generally sustained. In cases where the severe depression has continued in excess of five years, remission is unusual and western standard of care is medication maintenance expected through out the rest of the patient's life.

In this series of single case studies it is important to pay attention to the specific areas that had the most change. For example: subject 1 experienced the most shifts in areas involving avoidance, whether that meant that he had trouble remembering specific events associated with his trauma or was just generally having trouble concentrating. However, he had much less shift in areas involving emotions, and some of the emotional aspects were rated as more of an issue as treatment continued. It should also be noted that the most shift was seen in his two areas of primary difficulty.

Subject 2 generally had very good results. There was clear improvement in most categories, and overall she scored highest on the standardized instruments. Again, however, there were three particularly interesting areas: The first was clear improvement in the emotional areas, unlike cases one and three. The second was difficulty concentrating. That area showed very little change. It went up slightly for the first treatment, then down to not an issue, then back up to where it had started. It is possible those shifts may have had more to do with external factors than with the treatment itself. The third, and particularly important to note, is that the ability to remember traumatic events became worse, she could remember more of the events, throughout the treatment.

It was a slight issue at consent but by the second week it had become a serious issue, and remained there throughout the 8 weeks.

Subject 3 had good general improvement, with three particularly interesting areas. The first is that throughout the study he became more alert and watchful, or hyper observant. This increase was likely a byproduct due to the increase in sleep, and thus an increased ability to be alert. The overall improvement in sleep was the second area of interest. It went from showing a significant issue to showing no issue. By contrast there was little improvement in emotional areas.

What was most interesting in this set of case studies was that the areas of improvement revolved around each individual's chief complaint. For example: subject 3, who had improvement in sleep, also had a chief complaint of sleep issues. However, the areas that got worse are much harder to clarify. It is possible that energy simply moved from one place to another, and created a new pattern and problem area. Special note should also be made in the data results from the Goldberg Depression questionnaire. Instead of a leap in a particular area, there was gradual improvement that was sustained across all three cases showing a significant improvement by the end of the study.

This study was a sample of convenience based on who fit the parameters of the study and sought treatment at the university clinic. Future studies might want to expand population variables by recruitment and computerized randomization to treatment and control groups. Included in future randomization algorithms should be: background of triggers, types of individual triggers, and an expansion of the age ranges of the patients.

Study weaknesses included small sample size and the brief duration of the intervention. Future studies could match the length of the intervention to the severity and type of symptoms with existing understood rates of reoccurrence to determine long term stability of recovery. Future explorations could expand the reach of the study by adding: a sleep questionnaire, testing of neurotransmitters, amino acid production, full endocrine panel, and PET scans with contrast focusing on the amygdale, hippocampus, medial prefrontal cortex, and medula. In addition, having a psychiatrist on the study staff would be valuable so that adjustments could be made to any relevant western medications in a timely fashion. All subjects also had a worsening of expressed issues in the questionnaires from consent to the first treatment, even though two of the three were consented within two hours of the first treatment. This may be due to an anticipation effect, and might be another area to explore. Follow up would also be important in future studies, and is recommended at 3 months, 6 months, 9 months, and 12 months.

Conclusion

Traditional Chinese Medicine (TCM) treatment was effective at treating both PTSD and accompanying symptoms in three case studies of PTSD and long term severe depression. Study limitations include small sample size, lack of long term follow-up, and inability to compare specific treatments. Larger trials with follow-up at three, six, nine and twelve months are recommended. Comparisons between overall treatments would be

needed. Acupuncture shows promise as being able to treat a complicated mixture of psychological and physiological issues.

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