Acupuncture as an Adjunct to Brief Solution Based Psychotherapy for Generalized Anxiety Disorder with Repetitive Thought Syndrome:

A Case Series

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ABSTRACT

Background: Limited studies have been done with acupuncture in the treatment of Generalized

Anxiety Disorder (GAD). None were found using acupuncture as an adjunct to psychotherapy.

Modern research indicates acupuncture's positive effect on neurotransmitters in the brain

suggesting that acupuncture could be a good adjunct to psychotherapy in the treatment of GAD.

Objective: The objective of this pilot study is to report on the effectiveness of acupuncture as an

adjunct therapy to Solution Based Therapy in reducing anxiety levels. The point selection was

designed to directly address commonly expressed symptoms. A reduction in symptoms allowing

for progress in treatment was expected.

Method: Ten patients participated in this pilot study. All ten had a diagnosis of GAD and were

in treatment with and referred to the pilot study by a licensed therapist. The study lasted six

weeks with each participant receiving acupuncture with sterile disposable acupuncture needles

twice a week for the first two weeks and once a week for the next four weeks. Each participant

completed a GAD-7 survey before beginning treatment and once a week thereafter. In addition,

each participant was mailed a follow-up GAD-7 survey six weeks after the completion of

treatment.

Results: All ten participants experienced a reduction in their experience of Anxiety based on the

GAD-7 assessment. There were no adverse events associated with acupuncture treatment.

Conclusion: Acupuncture is a viable adjunct therapy to Brief Solution Based psychotherapy in

the treatment of GAD. The therapists involved noted improvement in problem solving during

therapy sessions.

Keywords: Generalized Anxiety Disorder, GAD, Acupuncture, Solution Based Psychotherapy

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Background

Generalized Anxiety Disorder (GAD) is a sub-category of the psychological disease known as Anxiety. Approximately 40 million people, 18%, in the United States are in treatment for GAD each year (Zhong, L, 2010). Their daily lives are interrupted by excess and exaggerated worry and repetitive rumination that is considered the hallmark of this disorder (Zhang, L, 2010). Worry that is out of proportion to the actual circumstances and difficult to control interferes with the ability to focus on current tasks (Mayo Clinic Website, 2014). Common symptoms include worry in the form of repetitive thoughts, inability to focus, being overwhelmed by even daily events with a sense of doubt about one's ability to cope with these events and emotional reactions not in proportion with a situation (Zhang, L, 2010). Physical manifestations are described by the person experiencing them as a panic attack. Western medicine views this disorder as an imbalance of neurochemicals such as serotonin and norepinephrine and therefore treat patients using anti-depressant medications to increase the amount of these neurochemicals in the brain. Selective Serotonin Reuptake Inhibitors (SSRIs) and Selective Norepinephrine Reuptake Inhibitors (SNRIs), the medications commonly used, do show positive effects in treatment of anxiety (Zhang, 2012). The down side to these medications is the slow onset of action, an increase in symptoms in the short term, a limited efficacy, tolerance, addiction and physical dependence and adverse side effects (Zhang, 2012) Psychotherapy is often recommended. Brief Solution Based therapy is one of the modern methods being used in the treatment of GAD.

Modern psychotherapy follows the model known as Brief Solution Based Therapy established by Steve De Shazer and Kim Berg (Visser, 2013) that is designed to treat the patient by helping them envision a desired life and mapping out steps to achieving that vision (Visser, 2013). Therapy is intended to be relatively brief and goal oriented (Visser, 2013). Clients are encouraged to focus on the life they wish to have and an expectation of change is established (Visser, 2013). It is a pragmatic approach to moving the therapy process

forward (Visser, 2013). The client determines what they want and decide how they wish to proceed (Visser, 2013). This method of therapy results in a faster reduction of anxiety symptoms than older, long term models. (Knekt, 2007).

Among areas of the brain shown to be affected and of special interest in GAD were the anterior cingulate cortex, the amygdala, insula and the prefrontal cortex (Etkin, 2010). particular, hyperactivity of the amygdala has been implicated in GAD as the source of persistent and repetitive thoughts seen as a dysfunctional method of emotional processing (Nitschke, 2009, Etkin, 2010). Research using aversive pictures and fMRI has shown that the amygdala is hyperactive and indiscriminate in patients suffering from GAD (Nitschke, 2009; Etkin, 2010). Further research has shown that this is only an adaptive response to an underactive Anterior Cingulate (Etkin, 2010). In GAD there is a failure to engage the anterior cingulate cortex and a resulting lack of dampening of the activity of the amygdala (Etkin, 2010). The cingulate cortex is responsible for the regulation of emotional reactions and determining which need more response, and which can be ignored (Vogt, 2009). In testing with aversive pictures and fMRI, normal participants showed increased activity in the cingulate cortex and a decrease in activity in the amygdala (Etkin, 2010). GAD sufferers showed decreased activity in the cingulate cortex and hyperactivity in the amygdala (Etkin, 2010). SSRI's showed some ability to activate the cingulate cortex (Etkin, 2010). This perhaps explains why these medications have some positive effect in the treatment of anxiety.

Modern technology has made it possible to research the effect of acupuncture on the neurotransmitters in the brain. Research presented in 2011 by Zhang Jin Zhang, et al. indicated that needle insertion activated neural and neuroactive components distributed in the skin, muscle and connective tissue surrounding the needle (Zhang, 2012). A Neural Acupuncture Unit (NAU) was defined as dense neural components, particularly afferent nerve fibers. (Zhang, 2012). NAU is a hypothetical representation of the physiological, biochemical and therapeutic response to needling stimulation as opposed to representing only local stimulation responses. (Zhang, 2012). This study traced the action of needle manipulation as an axon reflex that

traveled along the meridians and along dermatomes to spinal segments up through the brain stem into the cortical, limbic and subcortical systems activating modulation of several neurotransmitters in the brain (see figure 1) (Zhang, 2012). The same areas of the brain were activated regardless of location of the acupuncture needle, although a more intense reaction was observed with stimulation of actual acupoints as compared to control points (Zhang, 2012). NAUs were shown to transmit to and modulate brain areas (Zhang, 2012). Several specific areas of the brain involved in GAD including the anterior cingulate cortex and the amygdala were identified as being regulated by acupuncture stimulation (Zhang, 2012). Because of the effect of acupuncture areas of the brain neurochemical and behavioral abnormalities may be normalized (Zhang, 2012).

Zhang's research indicates that serotonin is modulated as a result of acupuncture (Zhang, 2011). This leads to a hypothesis that acupuncture could be effective in the treatment of anxiety disorders commonly treated with medications. Other areas of the brain and the neurotransmitters associated with them were also found to be affected. The amygdala, the prefrontal cortex and the cingulate cortex were among the areas identified in Zhang's study (Zhang, 2012). (see table 1).

A review of literature reveals that there have not been many studies done on treating Anxiety with acupuncture. Most of the studies found treated specific anxiety disorders such as Post Traumatic Stress Disorder (PTSD), Obsessive Compulsive Disorder (OCD), Pre-surgical anxiety and Dental anxiety (Pilkington, 2007). Only seven articles were found that discussed treatment of anxiety with acupuncture. Of those, two were literature reviews and only three discussed treatment for generalized anxiety specifically. All had general and varied treatment plans. None studied acupuncture as part of an integrated therapy treatment for anxiety. All indicated that acupuncture would be an effective in treatment of anxiety. Traditional Chinese Medicine (TCM) as an alternative form of treatment offered not only reduced side effects as compared to medications, but regulation of the imbalance of neurochemicals in the brain and

restoration of the mind/body/spirit balance. Mild cases of anxiety may benefit from acupuncture alone, while more severe cases may require a multifaceted approach.

There is no direct description of anxiety in TCM. There are descriptions of disorders such as Fear and Palpitations, Panic Throbbing and Agitation in ancient texts (Maciocia, 2009). TCM sees anxiety as Shen disturbance from either imbalances or deficiencies. Anxiety in its many forms is commonly seen in an acupuncturist's office as a secondary complaint. As such, it is treated as part of the overall treatment plan. Specific emotions and characteristics are associated with the Zang organs and are used in TCM diagnosis and pattern differentiation (see table 2)(Connelly, 1994, Maciocia, 1998). There are a number of TCM patterns associated with anxiety such as Heart/Spleen Qi Deficiency, Liver Qi Stagnation Affecting the Spleen, Kidney Qi Deficiency and Lung Qi Deficiency (Zhang, L. 2011) A review of literature shows that points are commonly selected through pattern differentiation and little standardization in treatment was found (Bussel, 2013). In addition, these studies tested the efficacy of acupuncture in general and not specific point protocols.

Patients with GAD present with exaggerated worry resulting in the inability to make decisions feeling overwhelmed by external events (Zhang, L 2011). The inability to make decisions indicates Gall Bladder Qi stagnation. GAD takes over the person's thinking resulting in an overwhelmed feeling. Points on the Gall Bladder channel such as Zulingqi (GB41) can be chosen. Zulingqi (GB41) is a point that can be used to clear away old, useless clutter and allow for new beginnings (Gumenick, 2013). This point on the Gallbladder channel can be seen as a point to treat emotional stress related to qi stagnation. Zulingqi (GB41) opens the Dai Mai. The Dai Mai on an emotional level has the ability to influence the creative flexible approach and allow for negotiation (Carey, 2013). Dai Mai revolves around issues and emotions (Gumenick, 2013). When used in treatment the Dai Mai gives the message "Go back, you are going the wrong way." (Carey, 2013).

Zulingqi (GB41) and Waiguan (TE5) are a traditional pairing of the Extraordinary Vessels Dai and Yang Wei. Paired together they can treat psycho-emotional disturbances (Gumenick, 2013). Waiguan (TE5) is associated in both traditional TCM and Five Element practice with boundaries regulating what is allowed in and what is kept out therefore regulating social relationships and gathering and assimilating cues from the environment (Gumenick, 2013). As the opening point of Yang Wei it is the defense of the exterior and wei qi. The Nan Jing indicates that an imbalance between Yin Wei and Yang Wei would result in obsessive thinking, loss of will and a lack of self-control (Starwynn, 2013).

Auricular Point Zero is the location of the umbilicus in the inverted fetus model developed by Nogier (Olsen, 1996). It is used as a centering or balancing point producing a balance of energy, hormones and brain activity (Olsen, 1996). Recent research in Europe has defined point zero as the location of the Cingulate Cortex in chronic conditions (Soliman, 2014).

Used together Zulingqi (GB41), Waiguan (TE5) and auricular Point Zero are hypothesized to reduce the level of anxiety experienced in GAD, specifically persistent repetitive thoughts, indecision and a feeling of being overwhelmed and distracted by outside events.

Methodology

This pilot study sought to examine the effectiveness of acupuncture as an adjunct therapy to Solution Based Psychotherapy for GAD. Ten patients participated in the entire six weeks of the study. An eleventh participant began the study, but withdrew after the fourth session due to a family emergency out of state (see fig. 2, flowchart). Each of the ten participants in the study were referred by a licensed Therapist and were diagnosed with GAD. Two were male, eight were female. Ages ranged from thirty-five years of age to sixty- six years of age. All participants received the same acupuncture protocol. The protocol consisted of GB 41 (Zu Lin Qi), SJ 5 (Wei Guan) bilateral and Auricular Point Zero on the dominant side. All treatments were administered by the same acupuncturist using Asiamed Type J2540 sterile acupuncture needles for the body points and Asiamed Type J2015 sterile acupuncture needles for the auricular point. Needles were retained for thirty minutes.

Each participant received eight acupuncture treatments over a six-week period. The study design required two sessions per week for the first two weeks and one session per week for the following four weeks. One participant had a death in the family and therefore skipped one entire week at week four. That participant did receive all eight treatments.

In order to objectively gauge the effectiveness of the study, the GAD-7 survey was chosen as a method of measurement. A score of 0-4 indicates minimal anxiety, 5-9 mild anxiety, 10-14 moderate anxiety and 15-21 severe anxiety. (Thomas, 2010) Using a threshold score of 10, the GAD-7 has a sensitivity of 89% and specificity of 82% for GAD (Thomas, 2010). A sample of the GAD-7 can be found in Appendix C. The GAD-7 is a standardized survey consisting of seven questions with four possible levels of anxiety for each question based on how often the participant has experienced each symptom over the previous two weeks. The GAD-7 survey was chosen not only because it is well accepted as a measurement of anxiety, but for its ease of administration. The survey was given to each participant before beginning acupuncture treatment to establish a baseline.

The survey was then administered once each week throughout the study. Another copy of the GAD-7 survey along with a self-addressed, stamped envelope was mailed to each participant in the study six weeks post acupuncture treatment to identify residual benefits of the treatments. The data collected was entered into a MS- Excel spreadsheet for comparison and analysis.

All participants signed a limited permission for discussion between the acupuncturist and their therapist so that subjective data could be gathered. Their therapist was informed and updated during the process of the patients' enrollment and participation in the study. An overall perception of the effect of the process was discussed at the conclusion of the six-week protocol of treatment.

All participants signed a confidentiality statement giving permission to use the data collected in this study.

Results

All ten participants who participated in the full eight-treatment protocol showed a reduction in anxiety symptoms over the course of treatment (see fig. 3). Baseline scores ranged from severe to mild anxiety. The percentage of improvement varied from 38% to 89% based on the data gathered using the GAD-7 survey. Individually there was expected variance from week to week as the degree of anxiety triggering events can be expected to vary over any given time period.

Individual results also varied. (see Fig. 4-through 5a-k). This was expected as the protocol was designed to treat a symptomatic pattern and not necessarily underlying constitutional patterns. There was also a wide variety of anxiety-triggering events that occurred over the six weeks of treatment among the ten participants.

At the six week follow up the GAD-7 scores for each of the ten individuals continued to indicate an overall improvement (see table 3). Follow up scores all fell in the mild to minimal anxiety rages. Seven of the ten continued to decrease in their scores. One of the ten remained stable and three showed a slight increase in their overall score, but did not approach their baseline score.

Discussion

The first anxiety patient ever referred to me came to me with a request from the therapist to help them make a decision, any decision. I incorporated a protocol I had previously found successful when used as part of a treatment plan for people experiencing anxiety as part of their presentation. As more anxiety patients were referred to me I heard a pattern in their description of anxiety. The most common theme was that their thoughts were so jumbled, scattered and persistent that they just could not sort out what to do next, or even what they wanted to do next. Simple decisions were becoming difficult. They felt out of balance emotionally and when there was an increase in pressure from the outside they felt totally overwhelmed and would experience acute instances that they described as panic attacks. Their therapists were working with them using an outcome or solution based process, but they were stuck, unable to move ahead.

From a TCM vantage point it seemed that I should consider the Gall Bladder system as the Gall Bladder is in charge of judgment or decision making. Without good decision making it is possible to try to set out plans, but difficult to determine how to implement them. Their decision making abilities seemed to be stagnated or lacking in energy, almost as though there was Qi stagnation in the Gallbladder, or Gallbladder Qi Deficiency. I envisioned trying to pull all those scattered feelings and thoughts together and it seemed the DAI might be able to help there. Therefore, the first point developed in my protocol was Zulingqi (GB41). This point on the Gallbladder meridian was used to soothe Qi stagnation due to emotional stress. It is also the confluent point of the Dai Mai, the belt that revolves around emotional issues. (Yuan, 2014), representing the ability to pull the scattered thoughts and feeling together. The second point in the protocol, Waiguan (TE5), the confluent point of the Yang Wei Mai, was added to strengthen boundaries on an emotional level. Overall, these patients seemed to feel very off

balance emotionally so I began using Auricular Point Zero in treatments as a way to bring them back to center, back to balance.

Adding this protocol to treatment plans did indeed seem to settle and strengthen patients with anxiety that was brought on by an acute, emotionally traumatic life event. The protocol also seemed to be of benefit to those whose anxiety had been ongoing for a long period of time without any current disruptive events, although not as dramatically. Patients began saying that they felt something like a shield, or a space between themselves and the day to day events bombarding them. They expressed an ability to slow down their thoughts and breathe before just reacting emotionally. Many observed that while life still offered stress and challenges they did not feel bombarded or overwhelmed and found it easier to focus on working their way through problems.

This pilot study was designed to test the hypothesis that these three points by themselves were providing the desired effect. The ten patients who participated were all diagnosed with GAD and in treatment with a Psychotherapist using Brief Solution Based Therapy. It seemed like a perfect therapy to combine with acupuncture as both seek to bring the patient back into balance so that they can move forward in their lives and have the tools they need to heal themselves. Only two of the study participants, Patient #2 and Patient #5 were on medication for anxiety. Patient #2 titrated off of medication during the six-week treatment period of the study and has been able to remain off medication after the study. Patient #5 remained on medication with no changes in medication during the course of treatment. Whether or not medication was changed after treatment ended is unknown.

As a group those patients that sought treatment from a therapist to deal with anxiety amplified by the occurrence of a major life event benefitted the most from this treatment with score improvements on the GAD-7 varying from 72.22% to 89.47%.

Patient #1 had recently experienced the loss of a job and had a family to support.

Motivation for finding another job was low as there was much indecision about what kind of

job would be appropriate. A return to previous areas of employment, becoming a member of a band, or perhaps starting a self-employed business were all being considered with no particular pros or cons to any being visualized. At the end of the treatment period I was presented with a business card for the self-employed business. Measured anxiety levels had gone from severe to moderate. Ongoing stress from starting a business presented anxious moments, but not an increase in anxiety levels during the six weeks following the treatment. This patient has finished psychotherapy and is looking forward to the future.

Patient #3 lost a spouse to cancer, had been treated for early stage lung cancer and lost a supporting friend to cancer all over the past year. During the treatment period at week two this patient's child came for a visit necessitating driving on the interstate to get to an airport one hour away. This was a major anxiety trigger for this patient who had always been dependent on others in the past to drive in such situations. Although there were moments of anxiety during the trip, they were short lived and overall the trip was uneventful. This patient arrived in the office the following week proclaiming "I am cured." Though probably not cured this patient continues to find an increased ability to stop and breathe when a situation seems uncertain instead of feeling frozen with indecision about how to deal with the situation. Measured anxiety levels have dropped from moderate to a perceived level of 0. Life continues to provide moments of uncertainty, but those are now mostly due to being willing to step out and try new things.

Patient #4 was a separated mother of one working through a contested divorce and having to live with friends to make ends meet. Unable to do even simple tasks like getting a child to school on time, or making it to work consistently in the beginning, this patient was able to sort through all of the legal and personal details of getting a divorce and manage the single parent responsibility of a child. Measured anxiety levels dropped from severe to mild during the six weeks of treatment. They continued to drop to a minimal level during the next six weeks. The divorce was finalized during the six week follow up period. This patient described

this treatment "as if a shield had been put up and while everything was still coming at me, it didn't strike me so I could ignore what needed to be ignored and deal with the rest."

Patient #5 had a traumatic background of loss of several family members over the past 3 years and was diagnosed with PTSD as well as GAD. This patient had reached a level of functioning that did not allow work and barely allowed leaving the house. Study treatment appointments even had to be scheduled to correspond with therapy appointments in the beginning to avoid the struggle with leaving the house. Week three this patient's rental was sold necessitating going out and searching for a new place to live and moving. This patient was able to deal with the frustration and the subsequent move with minimal stress and with the help of a good friend. Measured anxiety levels dropped from severe to mild. According to the therapist improvement is continuing and this patient began a volunteer job two days a week. At six weeks after treatment measured anxiety levels had increased, but still remained in the mild range.

Patient #7 had previously been diagnosed and treated for GAD and had recently returned to therapy after their parent was diagnosed with a brain tumor. This parent began treatment and as a result of treatment died during week three of the study. Choosing to remain in the study, this patient did miss one week of treatment immediately following the death of the parent. This patient found that they could handle the pressure, grief and family far better than expected from past experience. Measured anxiety levels dropped from severe to minimal. Going forward and returning to work did not result in an increase in anxiety levels. This patient remains in counseling for grief but not for anxiety.

Patient #9 could not remember a time without anxiety. Currently working in the family business alongside divorced parents, married just two years, and responsible for one parent's health care provided chronic stress. The recent anxiety trigger was a spouse's change of desire about wanting children and a personal fear of not being able to be a nurturing parent for an infant. This discussion was causing much worry and persistent playing of negative scenarios, even the contemplation of separation or divorce. There was also pressure from the feeling

that this was the first decision they had ever made that was entirely theirs to make and a real anxiety about being able to make such a decision. By the end of the treatment period the decision to try to have a child had been made. There was still some anxiety about parenthood, but an overall calmness about the ability to cope. Measured anxiety levels dropped from moderate to mild.

Patient #10 was a childhood abuse victim who until 3 months prior to entering the study had used alcohol to self-medicate. In a high stress job, anxiety triggering events such as sudden changes or "abusive" co-workers would result in being unable to continue working, having to escape the location, or becoming overly attentive to trivial details. On a personal level, an alcoholic partner was triggering anger and indecision about whether to stay in the relationship or not. Toward the end of the treatment period some bad financial news triggered symptoms of anxiety. This patient was pleased to find that a few moments later "I found myself calmly working, knowing that I would be able to work it out." A grumpy co-worker resulted in wanting to flee, but instead (for the first time in a long time) this patient found the ability to stand up and demand not to be treated disrespectfully. Measured anxiety levels had dropped from severe to mild.

Those who sought counseling to deal with ongoing, chronic anxiety also improved, though not by as great a percentage. I suspect this difference is due to those dealing with an aggravating emotional event entered the study with anxiety at a level above their normal set point and were able to drop back not only to their normal level, but to a level below it. Those who entered the study at a chronic level of anxiety, Patient #2, Patient #6 and Patient #8, were also able to drop down below that level, but the amount of drop was not as substantial.

Patient #2 titrated off SSRIs during the first two week of acupuncture treatment having not tolerated the side effects of three previous prescriptions. No new medications were tried during treatment and no medication has been used during the six week follow up. This patient had been in treatment for chronic anxiety for eight months with no current triggering events, although remarried with a two-year-old and five month old from the current marriage and

custodial care of two teenage daughters from a previous marriage produced stressful situations. As a salesman there was also quite a bit of stress associated with work. Subjectively this patient felt just as much stress at the end of the treatment, but a definite quieting of the run on worrying and restlessness previously experienced. Although the GAD-7 scores show only a 43.75% improvement over the treatment this patient remained off medication with no increase in score over the six follow up which is a significant result. Measured anxiety levels had dropped from severe to mild and remained there.

Patient #6 was dealing with chronic anxiety resulting from dealing with a parent with Alzheimer's disease. Week two of the study the other parent was diagnosed with dementia after wandering away from home. Week four the parent with Alzheimer's fell out of bed and broke a hip. Week five the patient #6 was diagnosed with Type II diabetes. Scores for this patient fell from 18 to 10 over the course of treatment in spite of several anxiety-triggering events. The scores never exceeded the baseline during the treatment period, but did not lower significantly - falling by only 44.44%. During the six week follow up period the score dropped to 6 and this patient was able to make multiple decisions about the ongoing care of parents and to implement healthy lifestyle changes. Measured anxiety levels had dropped from severe to moderate during the study and to a mild level by the six week follow up.

Patient #8 had been caring for a disabled family member for many years and had experienced the sudden loss of a child two years previous to entering the study. Life had taken on a rhythm of worrying, fear and loneliness that made doing anything impossible. During the study period this patient began to imagine that there might be more to do than just sit and wait. Though the GAD-7 score only improved by a percentage of 38.46%. This patient was able to reduce the amount of alcohol being used for self-medication by 75%, a significant improvement. Measured anxiety levels dropped from moderate to mild and remained there. During the six week follow up period this patient started a support group at a local church and was busy finding speakers and organizing meetings.

It is impossible at this time to know if the suspicion that those with chronic anxiety not exacerbated by a triggering life event show less improvement in their scores because they come in already at a true baseline rather than an exaggerated one. There was only a brief six-week window of study and the start value for their level of anxiety was measured on the first day they came for treatment. There was no availability of data on where they would have measured over time prior to treatment. Subjectively, their therapist did note improvement in anxiety symptoms allowing for more focus on underlying problems. In some cases they had a long term relationship, in others only over four to six months. Also, while therapists do long detailed intake surveys in order to diagnose GAD, this study used the relatively simple GAD-7 survey to track changes in the anxiety level of the participants. This was done for several reasons. First, the GAD-7 is a widely accepted standardized survey for analyzing the impact of Generalized Anxiety symptoms. Secondly, I am not licensed or certified to make complicated diagnoses so was not able to use a lengthy, complicated survey designed for diagnosis and analyze its data. Thirdly, the GAD-7 offered a reliable, easy to score and analyze survey that was short and simple for the study participants to fill out each week. Results are based on a standard scoring method with a decrease in score indicating a reduction in anxiety symptoms. The downside to this survey is in the wording of the lowest category. Some participants found the choice "not at all sure" Most stated that they were viewing this option as "not at all" when answering. Others never discussed this choice and it is unknown how they interpreted it other than seeing it as a lower level than "several days".

As a pilot study to test the hypothesis that a protocol of Zulingqi (GB41), Waiguan (TE5) and auricular Point Zero would lead to a reduction in anxiety and would allow the patient to be able to calmly face and work through problems and stressors this study showed positive results for all participants. The results were measured objectively and subjectively. Objectively through the use of the GAD-7 survey the average percentage of improvement was 66.88% and all maintained or increased their improvement in anxiety levels in the six weeks that followed the treatment. Subjectively through the comments directly from the participants and from

their therapist, all saw a positive outcome. To explain the variations in the degree of outcome it would be necessary to follow patients using the same measurement standard for a period of time before they began receiving treatment, to follow them for a longer period of time after the treatment ended and to have a larger pool of patients in the study.
It would also be worth testing if the results, especially for chronic, ongoing anxiety would be improved by using this protocol along with individualized treatment plans. It is unknown whether the medications have any effect on the outcomes. One participant on medication showed great improvement. The other showed improvement to a lesser degree. As acupuncture does regulate serotonin and the medications used are SSRIs it is assumed that acupuncture would be able to increase the Serotonin available if needed. It should therefore augment the medication effects. However, as SSRIs work to keep the levels up, perhaps the effect of acupuncture in this particular area is not as obvious as in patients who are not on medication. It might be possible to use acupuncture to aid patients that do not tolerate the side effects of these medications allowing them to discuss with their prescribing doctors either smaller doses or weaning off the medication altogether. That is a question that can certainly not be answered with this study. Perhaps a future study will investigate.

The positive results shown in this pilot study indicate that for patients suffering from GAD, in treatment with a therapist using Solution Based Therapy, the protocol used would be a beneficial as an adjunct therapy.

Conclusion

All participants in this study showed positive improvement in their anxiety as measured using the GAD-7 survey, dropping at least one if not two levels. Major life events that occurred during the course of the study resulted in variations between the weekly surveys, but did not alter the overall improvement. Subjectively, those life events were seen as easier to work through. Those whose anxiety was amplified due to recent major life events experienced a greater degree of improvement than did those who were experiencing chronic, ongoing anxiety. This might be explained by seeing the start value of those with aggravating emotional life events as artificially high, or at an acute level to start. It can be suggested, but not proven, that patients not only returned to what might be considered their normal level of anxiety, but to a lower level. A longer study with tracking for a period of time before treatment began would be necessary to evaluate that hypothesis.

It can, however, be shown from this study that the use of this protocol as an adjunct to Solution Based Therapy for General Anxiety Disorder has a positive benefit. Participants not only showed improvement through their scores on the GAD-7. Their subjective statements and experiences indicated a benefit not only in their treatment progression, but in their everyday lives as well.

Table 1 Used with permission from Zhang-Jin Zhang (Zhang 2012)

Brain regions Functional neuroimaging Acupuncture-associated effects response to acupuncture Primary somatosensory cortex Activation Pain and mechanoreceptor-activated signals Prefrontal cortex Activation Cognition and emotion Activation/Deactivation Insula Pain Anterior cingulate cortex Deactivation Pain, attention, memory, and emotion Autonomic, neuroendocrine, visceral functions, and Hypothalamus Activation stress processed center Amygdala/hippocampus Activation Encoding emotional signals and short-term memory Thalamus Activation Pivotal relay station processing sensory inputs Cerebellum Activation Locomotor coordination, higher-order cognitive and emotional function Periaqueductal gre (PAG) and Activation Modulating opiodergic and serotonergic activity raphe nuclei involved in pain, sleep, and consciousness.

Table 2 The Five Elements and Emotions

	Organs	Emotions	Character
Wood	Liver	Anger, frustration	Planning
	Gallbladder		Decision making
Fire	Heart	Joy	Sovereign
	Small Intestine		Separation of Pure and Impure
	Pericardium		Protector of the Heart
	San Jiao		Balance
Earth	Spleen	Worry, Over Thinking	Distribution
	Stomach		Sea of Water and Grain
Metal	Lung	Grief, Sadness	Minister
	Large Intestine		Letting go
Water	Kidney	Fear	Will Power
	Urinary Bladder		Holding on

 Table 3
 Individual GAD-7 scores at equally spaced intervals.

Patient Number	Week 1 Intensity	Week 6 Intensity	6th Week Follow Up Intensity
Patient #1	18	5	8
Patient #2	16	9	9
Patient #3	8	2	0
Patient #4	16	4	3
Patient #5	19	5	8
Patient #6	18	10	6
Patient #7	16	4	3
Patient #8	13	8	5
Patient #9	11	2	1
Patient #10	19	2	-
Composite Patient	15.4	5.1	4.3

Ten patients participated in the entire treatment period. Presented in this table are the initial scores, those at the end of the six week treatment period and the six week follow-up scores.

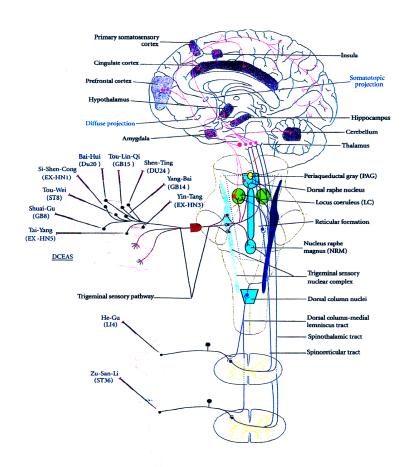


FIGURE 6: Schematic illustration of multiple central neural pathways transmitting NAU afferent impulses from different parts of the body. The brain areas commonly observed in neuroimaging response to acupuncture stimulation are indicated with gray shadow. DCEAS: dense cranial electroacupuncture stimulation.

Figure 2 Flow Chart

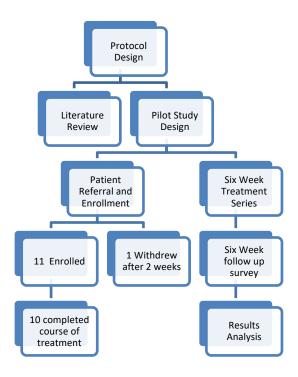


Figure 3 Composite results from the GAD-7 surveys

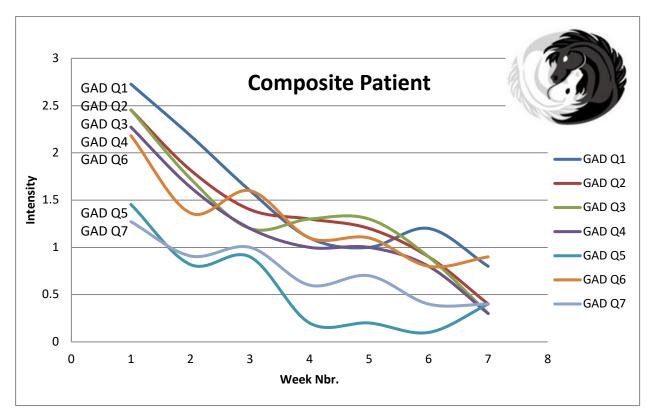


Figure 4 Individual GAD-7 results - six week treatment period

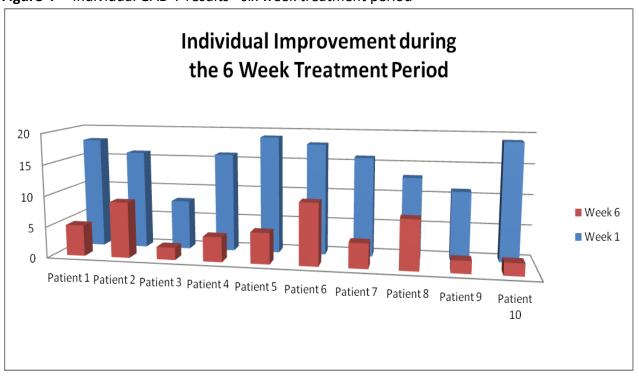


Figure 5a - Patient #1 GAD-7 Survey Results

Aslan Wellness - Allyson Wilson, AP											Р	atie	ent #	#1														
Patient #1		We	ek :	1		We	ek 2	2		We	ek 3	3		We	ek 4	4		We	eek !	5		We	ek (6			Veek w U	
	Not at all sure	Several days	Over half the days	Nearly every day	Not at all sure	Several days	Over half the days	Nearly every day	Not at all sure	Several days	Over half the days	Nearly every day	Not at all sure	Several days	Over half the days	Nearly every day	Not at all sure	Several days	Over half the days	Nearly every day	Not at all sure	Several days	Over half the days	Nearly every day	Not at all sure	Several days	Over half the days	Nearly every day
1. Feeling nervous, anxious, or on edge				X	Ţ			X	T			X	<u></u>	X				X				X					X	
2. Not being able to stop or control worrying			Х				Х			X				X				Х				Х				Х		
3. Worrying too much about different things			Х				Х			Χ				X				Х				X				Х		
4. Trouble relaxing				Х				Х				Х		X			X					X				х		
5. Being so restless that it's hard to sit still				Х			Х				Χ		X				X				X					Х		
6 . Becoming easily annoyed or irritable				Х				Х				Х		Χ				Х				Χ				Х		
7. Feeling afraid as if something awful might happen			Х		.]		X		}_	X			X				}	X			X				<u> </u>	X		
Total for the week	0	0	6	12	0	0	8	9	0	3	2	9	0	5	0	0	0	5	0	0	0	5	0	0	0	6	2	0
Life Event																												
Generalized Anxiety Disorder Assessment GAD-7				18				17				14				5				5				5				8
										3.5	Т																	7
										3	+		$\overline{}$			1								_				-
										2.5	+		\rightarrow			\rightarrow								_		— Se	ries1	
										2	L													_		—Se	ries2	
										'						1	1								_		ries3	
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						-				0.5	1						Δ	X		大						S e	ries7	-
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										-0.5	ф			2			4				6			8				-
			-			-				-0.5														_				-

Figure 5b - Patient #2 GAD-7 Survey Results

Aslan Wellness - Allyson Wilson, AP											P	atie	ent a	#2														
Patient #2		We	ek 1	1		We	ek 2	2		We	ek :	3		We	ek 4	1		We	ek !	5		We	ek (6	F	ollo	w Up)
	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days
1. Feeling nervous, anxious, or on edge				X			X				X				Х			X					X				Х	
2. Not being able to stop or control worrying				Х				Х				Х				Х				Χ			Χ				х	
3. Worrying too much about different things				Х				Х			Х				Χ					Х			Χ				х	
4 . Trouble relaxing				Х		Х					Х					Х			Х				Х				х	
5. Being so restless that it's hard to sit still			Х				Х			Х			Х				Х				Х					х		
6 . Becoming easily annoyed or irritable			Х			Χ				Χ					Х			Х				Х			х			
7. Feeling afraid as if something awful might happen	Χ	ļ			X				X				Х				Х				Х		ļ		х			
Total for the week	0	0	4	12	0	2	4	6	0	2	6	3	0	0	6	6	0	2	2	6	0	1	8	0	0	1	8	0
Life Event									X																			
Generalized Anxiety Disorder Assessment GAD-7				16				12				11				12				10				9				9
											3.5 3 2.5 2 1.5 1 0.5 0	0			2	X	7	4			6					Se Se Se Se	ries1 ries2 ries3 ries4 ries5 ries6	

Figure 5c - Patient #3 GAD-7 Survey Results

Aslan Wellness - Allyson Wilson, AP											Р	atie	ent i	#3													
Patient #3		We	ek :	1		We	ek 2	2		We	ek :	3		We	ek 4	l		We	eek!	5		We	ek (5	F	ollo	w Up
	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Nearly every days Over half the days
Feeling nervous, anxious, or on edge		X					X		X				X				X					X			Х		
2. Not being able to stop or control worrying			X				Χ		X				X				X				X				х		
3. Worrying too much about different things		Х				Х			X				X				X				Х				х		
4. Trouble relaxing			Х				Χ			Х			Х				Х				Х				х		
5. Being so restless that it's hard to sit still	Х					Χ			Х				Х				Х				Х				х		
6. Becoming easily annoyed or irritable			Х			Χ				Х				Х			X					Х			х		
7. Feeling afraid as if something awful might happen	Х	ļ	ļ		ļ	Х			X	ļ	ļ		X	ļ	ļ		Х				Х	ļ			х		
Total for the week	0	2	6	0	0	4	6	0	0	2	0	0	0	1	0	0	0	0	0	0	0	_	0	0	0	0	0 0
Life Event					X																X						
Generalized Anxiety Disorder Assessment GAD-7				8				10				2				1				0				2			0
										1	2.5)			2			4			6			8	-	— See — See — See — See	eries1 eries2 eries3 eries4 eries5 eries6

Figure 5d - Patient #4 GAD-7 Survey Results

Aslan Wellness - Allyson Wilson, AP											Р	atie	ent a	#4														
Patient #4		We	ek :	1		We	ek 2	2		We	ek	3		We	ek 4	1		We	eek!	5		W	eek	6	F	ollo	w L	Jр
	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Z	Several days	Over half the days	Nearly every days
1. Feeling nervous, anxious, or on edge				X				Х			X			X				X				X				Χ		
2. Not being able to stop or control worrying				Х				Х			X			Х				Х				Х			Х			
3. Worrying too much about different things				Х			Х			Х					Χ			Х			X				Х			
4 . Trouble relaxing		X					X			Х				Х				Х				Х			Х			
5. Being so restless that it's hard to sit still		X			X					Х				Х			X				X					Χ		
6 . Becoming easily annoyed or irritable				Х				Х				Х		Х				Х				Х				Χ		
7 . Feeling afraid as if something awful might happen		ļ	X		X	ļ			X				X				X				Х				X			
Total for the week	0	2	2	12	0	0	4	9	0	3	4	3	0	5	2	0	0	5	0	0	0	4	. 0	0	0	3	0	0
Life Event																_				_			-					_
Generalized Anxiety Disorder Assessment GAD-7				16				13				10				7				5				4				3
										3	3.5														-			7
										1 2	2.5 -			_		$\overline{}$	\	_	_			_	_		_ =		Series	
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											0 -)	1		2	3		4		5	6		7		8			
										-(0.5 4														_			ŀ

Figure 5e - Patient #5 GAD-7 Survey Results

Aslan Wellness - Allyson Wilson, AP											Р	atie	ent a	#5													
Patient #5		We	ek :	1		We	ek 2	2		We	ek	3		We	ek 4	1		We	eek !	5		We	ek	6	F	ollo	w Up
	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Nearly every days Over half the days
1. Feeling nervous, anxious, or on edge				X			X			X				X				X				X				x	
2. Not being able to stop or control worrying				Х		Х				X				Χ				Х				X				х	
3. Worrying too much about different things				Х		Χ					Х			Χ				Х				Х				х	
4. Trouble relaxing				Х		Χ				X				Χ			X				Х					х	
5. Being so restless that it's hard to sit still			Х		Х					Х			Х					Х			Х					х	
6. Becoming easily annoyed or irritable			Х		X					Х				Х				Х				Х					х
7. Feeling afraid as if something awful might happen			ļ	Х	1	Х			-		Х		1	X			ļ	Х				X			<u> </u>	х	
Total for the week	0	0	4	15	0	4	2	0	0	5	4	0	0	6	0	0	0	6	0	0	0	5	0	0	0	6	2 0
Life Event					X																						
Generalized Anxiety Disorder Assessment GAD-7				19				6				9				6				6				5			8
											3.5 -		1												-	S	eries1
										1	2 - 1.5 -		7	+													eries2 eries3 eries4 eries5
										c	1 -			<u> </u>			7		X						_ _	S	eries6 eries7
										c	0 - 0.5 -)	1		2	3		4		5	6		7		8		

Figure 5f - Patient #6 GAD-7 Survey Results

Aslan Wellness - Allyson Wilson, AP											Р	atie	ent a	#6														
Patient #6		We	ek :	1		We	ek 2	2		We	ek 3	3		We	ek 4	1		We	eek	5		We	ek (6	F	ollo	w L	Jр
	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days
1. Feeling nervous, anxious, or on edge				Χ				X			Х					Х			X				X				Х	
2. Not being able to stop or control worrying				Х			Х				Х					Х			Х				Х			х		
3. Worrying too much about different things				Х				Х			Х					Х				Х			Х			х		
4. Trouble relaxing				Х				Х		Х						Х			Х				Х		х			
5. Being so restless that it's hard to sit still			Х		Х				Х				Х				Х				Х							
6. Becoming easily annoyed or irritable				Х		Х					Х				Х					Х	Х				Х	Х		
7. Feeling afraid as if something awful might happen		X		ļļ	1	X			<u> </u>		Х	ļl	1	X					X		ļ		Х		<u> </u>	Х		
Total for the week	0	1	2	15	0	2	2	9	0	1	10	0	0	1	2	12	0	0	8	6	0	0	10	0	0	4	2	0
Life Event	Х												X															
Generalized Anxiety Disorder Assessment GAD-7				18				13				11				15				14				10				6
										3	3.5 T														-			7
											3 -		1						7	1						— \$0	ries1	
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Figure 5g - Patient #7 GAD-7 Survey Results

Aslan Wellness - Allyson Wilson, AP											Р	atie	ent a	#7														
Patient #7		We	ek :	1		We	ek 2	2		We	ek	3		We	ek 4	l I		We	eek!	5		W	eek	6	F	ollo	w Up	,
	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days
1. Feeling nervous, anxious, or on edge				Х				X		X				X				X				X				x		
2. Not being able to stop or control worrying			Х				Χ			X				X				Х			X				х			
3. Worrying too much about different things			Х				Х			Х				Х				Х				Х			х			
4. Trouble relaxing				Х			Χ			X			X					Х				Х				х		
5. Being so restless that it's hard to sit still		Х				Х				X			Х				X				Х				х			
6. Becoming easily annoyed or irritable				Х			Χ			Х				Х				Х				Х				х		
7. Feeling afraid as if something awful might happen			X		1	ļ		Χ	-		X]	X	ļ		ļ	X			Х	4			х			
Total for the week	0	1	6	9	0	1	8	6	0	_	2	0	0	5	0	0	0	6	0	0	0	4	0	0	0	3	0	0
Life Event	Х								X																			
Generalized Anxiety Disorder Assessment GAD-7				16				15				8				5				6				4				3
										1	3.5 - 3 - 2.5 - 2 - 1.5 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -		1		2	3		4	7	5	6		7				eries1 eries2 eries3 eries4 eries5 eries6	

Figure 5h - Patient #8 GAD-7 Survey Results

Aslan Wellness - Allyson Wilson, AP											Р	atie	ent a	#8														
Patient #8		We	ek :	1		We	ek 2	2		We	ek 3	3		We	ek 4	4		We	eek	5		We	ek (5	F	ollo	w U	p
	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days
1. Feeling nervous, anxious, or on edge				Χ			X					X		Х					X			X				Х		
2. Not being able to stop or control worrying				Х			Χ					Х			Х				Х				Х			Х		
3. Worrying too much about different things			Х				Х			Х				Х					Х			Х			х			
4. Trouble relaxing			Х				Х			Х			Х						Х			Χ			х			
5. Being so restless that it's hard to sit still		Х				Х				Х			Х					Х				Χ				х		
6. Becoming easily annoyed or irritable		Х				Х					Х			Х				Х				Х				х		
7. Feeling afraid as if something awful might happen		X	ļ	ļļ	ļ	Х			-	X				ļ	X	ļļ		Х			ļ	X			<u> </u>	х		
Total for the week	0	3	4	6	0	3	8	0	0	4	2	6	0	3	4	0	0	3	8	0	0	6	2	0	0	5	0	0
Life Event																												
Generalized Anxiety Disorder Assessment GAD-7				13				11				12				7				11				8				5
										\parallel	.5 T														-			7
											3 +		7												- -	- S	eries1	1
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										Щ	0		1	:	2	3		4		5	6		7		8			

Figure 5i - Patient #9 GAD-7 Survey Results

Aslan Wellness - Allyson Wilson, AP											Р	atie	ent :	#9														
Patient #9		We	ek :	1		We	ek 2	2		We	ek	3		We	ek 4	1		We	eek	5		W	eek	6	F	ollo	w U	р
	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days
1. Feeling nervous, anxious, or on edge				Χ			X			X			X				X					X			Х			
2. Not being able to stop or control worrying		Χ				Х			X				X				X				Х				х			
3. Worrying too much about different things				Х		Х				Х				Х			X					Х			х			
4. Trouble relaxing		Х			Х				X				X					Х			Х				х			
5. Being so restless that it's hard to sit still	Х				Х				Х				Х				Х				Х				х			
6. Becoming easily annoyed or irritable		Х				Х			Х				Х					Х			Х					Х		
7. Feeling afraid as if something awful might happen	Х		Х		Х					X	ļ		Х				X				Х				х			
Total for the week	0	3	2	6	0	3	2	0	0	3	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	1	0	0
Life Event																												
Generalized Anxiety Disorder Assessment GAD-7				11				5				3				1				2				2				1
											3 - 3 - 22.5 - 2 - 11.5 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	0	1		2	3		4	X	5	6		7		- •	— 9 — 9 — 9 — 9	Geries Geries Geries Geries Geries	2 3 4 5 6

Figure 5j - Patient #10 GAD-7 Survey Results

Aslan Wellness - Allyson Wilson, AP Patient #10											Pa	atie	nt #	10)														
	Week 1				Week 2				Week 3					Week 4				Week 5				Week 6				Follow Up			
	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	
1. Feeling nervous, anxious, or on edge				X			X			X				X				X				·····›	(Х				
2. Not being able to stop or control worrying				Х			Χ			X				X				Х			X	(X				
3. Worrying too much about different things				Х		Χ				X				Х				Х			X				X				
4. Trouble relaxing				Х			Χ			Χ				Х				Х			X				Х				
5. Being so restless that it's hard to sit still				Х			Х				Х			Х			X				Х	(Х				
6 . Becoming easily annoyed or irritable				Х			Х				Х			Х				Х				>	(Х			
7. Feeling afraid as if something awful might happen		Х			1	X			-	Х]	X			1	Х		-	Х	(Х				
Total for the week	0	1	0	18	0	2	10	0	0	5	4	0	0	7	0	0	0	6	0	0	0) 2	2 0	0	0	1	0	0	
Life Event																													
Generalized Anxiety Disorder Assessment GAD-7				19				12				9				7				6				2				1	
											3.5													_				7	
										\perp	3 •													-				. -	
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Figure 5k - Patient #11 GAD-7 Survey Results

Aslan Wellness - Allyson Wilson, AP											Pa	atie	nt #	‡1 1	L													
Patient #11		Week 1			Week 2				Week 3				Week 4				Week 5				Week 6			ı	Follow Up			
	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days	Not at all sure	Several days	Over half the days	Nearly every days
1. Feeling nervous, anxious, or on edge			Х		X																							
2. Not being able to stop or control worrying			Х		Х																							
3. Worrying too much about different things			Х			Х																						
4 . Trouble relaxing		Х			Х																							
5. Being so restless that it's hard to sit still		Х			Х																							
6 . Becoming easily annoyed or irritable		Х			Х																							
7. Feeling afraid as if something awful might happen	X				X				J																<u> </u>			
Total for the week	0	3	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Life Event																												
Generalized Anxiety Disorder Assessment GAD-7				9				1				0				0				0				0				0
This patient withdrew from study due to family emer	genc	y in	anot	hers	tate						2.5 -														_			
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Appendix A

Sample Forms

GAD-7

Informed Consent

Permission



Aslan Wellness Allyson Wilson, AP 754-400-7278

foxtail.aw@gmail.com

Over the last 2 weeks, how often have you been bothered by the following problems?

	Not at all sure	Several days	Over half the days	Nearly every day
Feeling nervous, anxious, or on edge	0	0	0	0
Not being able to stop or control worrying	0	0	0	0
Worrying too much about different things	0	0	0	0
4. Trouble relaxing	0	0	0	0
5. Being so restless that it's hard to sit still	0	0	0	0
6. Becoming easily annoyed or irritable	0	0	0	0
7. Feeling afraid as if something awful might happen	0	0	0	0
GAD-7	_			
Patient name	D	ate		



Aslan Wellness 754-400-7278

Allyson Wilson, AP foxtail.aw@gmail.com

Informed Consent Form

My name is Allyson Wilson and I am a licensed acupuncturist and am now studying for my Doctorate in Oriental Medicine at Atlantic Institute of Oriental Medicine. I am doing a pilot study on Acupuncture as an Adjunct Therapy to Post Modern Solution Based Therapy. This research is supervised by Dr. Harry Hong and being done in cooperation with Sloane Veshinski. I would like to invite you to be a part of this study. This form will provide information about the study so that you can make a decision about whether you want to participate. if you choose to participate, please sign in the space at the end of this form.

What is the study about?

The purpose of the study is to look at acupuncture treatment as an adjunct to therapy for anxiety. Acupuncture is used here to control stress, repetitive thoughts and increase the patient's ability to cope and move forward. The focus is on the effectiveness of the acupuncture protocol to aid in the patient's response to therapy and to enhance day to day living.

What does participation involve?

If you decide to participate in this study you will be asked to receive 8 acupuncture treatments over a six week period. The protocol involves a thirty minute acupuncture treatment 2 times a week for 2 weeks and once a week for 4 weeks. Progress will be monitored using a short survey, the GAD-7 before treatments begin, once weekly during treatment and 2 months following treatment. Participation is voluntary.

Why are you being asked to participate?

You are being asked to participate because Sloane Veshinski has identified you as someone she believes this treatment may help.

What are the risks involved in this study?

Acupuncture is considered a safe, effective treatment. As it does involve the use of very thin filiform needles there is a slight risk of bruising, numbness or tingling near acupuncture sites that may last for a few days, dizziness and fainting. Infection is a possible risk, however the clinician uses sterile disposable needles and maintains a clean and safe environment. Rarely there may be a risk of spontaneous miscarriage so please inform the clinician if there is a chance that you could be pregnant. A rare complication of acupuncture is nerve damage or organ punctures. No needles in this study will be inserted near major organs. Needles will be inserted in the feet, arms and ear.

Are there any benefits to participation?

Acupuncture in general is found by most to be relaxing and releases endorphins. It is the hope of the study that in addition you will benefit by reduction of anxiety symptoms and an increased ability to cope on a daily basis. It is also the hope of this study that acupuncture will supplement your ongoing therapy.

How will the Participants' confidentiality by protected?

The results of the study will be published, but your name or identity will not be revealed. In order to maintain confidentiality of your records pseudonyms or fake names will be used. Further all information will be kept in a locked cabinet in the locked office of the clinical practice.

Your information will be seen by Allyson Wilson only. An additional form will be provided if you are willing to give permission to Allyson Wilson and to Sloane Veshinski to share information - only if it pertains to the study. In all other cases, such as discussions with the academic supervisor only pseudonyms or fake names will be used.

What happens if the participant does not want to continue in the study?

Participation in the study is voluntary. If you choose not to participate, or if you choose to withdraw from the study, you may do so at any time.

Will it cost anything to participate in the study?

Your participation is voluntary and the protocol treatment will be administered at no charge to you.

Will participants be compensated for illness or injury?

You are not waiving any of your legal rights if you agree to participate in this study; however no funds have been set aside to compensate you in the event of harm.

Voluntary Consent

By signing this form, you are saying that you have read this form or have had it read to you. You are also saying that you understand the risks and benefits of this study and that you know what you are being asked to do. We will be happy to answer any question you have about the study. If you have any questions, please feel free to contact Allyson Wilson at 754-400-7278, or by email at foxtail.aw@gmail.com

Note: by signing below you are agreeing to participate in this study. You may choose to withdraw this consent at any time. Please keep on copy of this form for your records.

Your Name (please print)		
Your Signature:		
Date:		



Pilot Study of Acupuncture as an Adjunct Therapy for Anxiety

Capstone Project of Allyson Wilson

Doctorate of Acupuncture and Oriental Medicine

This pilot study is being conducted for presentation as a Capstone Paper for a Doctorate of Acupuncture and Oriental Medicine with an emphasis in Integrated Medicine. This study is being conducted by Allyson Wilson, AP as Aslan Wellness with cooperation of Sloane Veshinski as The Sloane Center.

The participants involved in this study are invited on the recommendation of The Sloane Center. All data collected can be used only for the purposes of this study. In order to judge the effectiveness of this acupuncture protocol as an adjunct to psychotherapy it may be necessary to discuss patient progress, only as it pertains to this study. All HIPPA guidelines will be followed.

only as it pertains to this study. All Hirl	A guidelines will be followed.
information pertaining to the study, v	give Allyson Wilson, AP and Aslan Wellness permission to tudy of Acupuncture as an Adjunct Therapy for Anxiety, and only with Sloane Veshinski and the Sloane Center for a time period oday's date) until the 21st of December, 2014.
Print name	
Signature	Date
	give Sloane Veshinski and The Sloane Center permission to ing to the progress and effectiveness of the Pilot Study of Anxiety with Allyson Wilson, AP and Aslan Wellness.
Print name	
Signature	

Pilot Study

Acupuncture as an Adjunct Therapy

Capstone Project for Allyson Wilson

Doctorate of Acupuncture and Oriental Medicine

This pilot study is being conducted for presentation as a Capstone paper for a Doctorate of Acupuncture and Oriental Medicine with an emphasis in Integrated Medicine. This study is being conducted by Allyson Wilson, AP as Aslan Wellness with cooperation of Lisa Zucker MSW, LCSW, CT.

The participant involved in this study is invited at the recommendation of Lisa Zucker. All data collected can be used only for the purposes of this study. In order to judge the effectiveness of this acupuncture protocol as an adjunct to psychotherapy it may be necessary to discuss patient progress, only as it pertains to this study. All HIPAA guidelines will be followed.

the Pilot Study of Acupuncture as an Adju	yson Wilson, AP and Aslan Wellness permission to slunct Therapy for Anxiety, and only information pertal limited to(today's date) until the 21st of	aining to the study, with Lisa
Print Name	_	
Signature	Date	
	sa Zucker MSW, LCSW, CT permission to share inforess of the Pilot Study of Acupuncture as an Adjunct	
Print Name	_	
Signature		-

Appendix B

Therapist Letters

Dr. Sloane Veshinski, Ph.D, LMFT, CAP
Lisa Zucker, MSW, LCSW, CT



3325 Hollywood Boulevard

Suite 301

Hollywood, FL 33021

ph: 954.925.1113

fax: 954.925.1339

e-mail: thesloanecenter@bellsouth.net

www.thesloanecenter.com

September 22, 2014

Atlantic Institute of Oriental Medicine 1623 S. Andrews Avenue Ft. Lauderdale, FL 33316

RE: Allyson Wilson

To Whom It May Concern:

This letter is written in support of and with regard to the aforementioned individual and her research study.

I have had the opportunity to work collaboratively with Ms. Wilson over the last 2 years. Her mastery and application of oriental medicine has been an effective adjunct to my work as a licensed psychotherapist. Further, in that I was able to provide research subjects for her study; her work has assisted my clients in successfully decreasing/eliminating their anxiety symptoms.

It is my hope that your institution will see clear to awarding her a Doctorate in Oriental Medicine, as she has earned not only the degree but created a means of applying oriental medicine to the traditional practice of therapy with clear and distinguishable results.

Thank you for your consideration in this matter.

Respectfully,

Dr. Sloane Veshinski, Ph.D., LMFT, CAP

Owner, The Slpane Center, Inc.

cc: Allyson Wilson

Allyson A. Wilson

From: Sent: Lisa Zucker [lisamzucker@gmail.com] Friday, October 31, 2014 10:12 AM

Γο: Subject: Allyson A. Wilson Acupuncture

Dear Allyson,

I am very pleased to report my findings with my clients resulting from your study.

One client has felt able to reduce the number of sessions necessary for therapeutic intervention as she feels her anxiety level is manageable given the stress management techniques we have worked on combined with the lasting effects of your sessions with her.

Another client maintains her ongoing sessions, but feels more able to address the issues she comes to therapy for as her anxiety and stress are more manageable. Rather than spend time working through her anxiety, we are able to directly treat her underlying issues on a deeper level.

Your work is really showing an excellent model for the benefit of complementary therapeutic interventions in working with people who are experiencing anxiety and stress. As a therapist who specializes in chronic/terminal illness and grief / loss, it is exceptionally helpful to me in my work to have a proven and skilled anxiety reduction program to enable my clients to come to therapy ready to work on their underlying causes as you simultaneously treat their symptoms. What a beautiful collaboration that truly helps people who are so much in need.

Thank you for your tireless, dedicated work in the field and looking forward to continuing our efforts to help people together.

Warmly, Lisa

Appendix C

Permission Letter from

Dr. Zhang

Dear Allyson:

It is nice to hear from you. Sure, you have my permission to use any figures and charts I have published. I hope your study will go smoothly and have positive results.

Regards,

Zhang-Jin Zhang (張樟進), BMed, MMed, PhD

Professor, Assistant Director for Clinical Affairs,

School of Chinese Medicine

Honorary Professor of Psychiatry, Department of Psychiatry

Honorary Professor of Family Medicine and Primary Care,

Department of Family Medicine and Primary Care

Honorary Professor of Anatomy, Department of Anatomy

LKS Faculty of Medicine, The University of Hong Kong

Room LG08, Estate Building

10 Sassoon Road, Pokfulam

Hong Kong, China

Tel: (+852)2589-0445

Fax: (+852)2872-5476

E-mail: zhangzj@hku.hk

From: Allyson A. Wilson [mailto:foxtail@southwind.net]

Sent: Wednesday, June 25, 2014 9:39 PM

To: zhangzj

Subject: DAOM capstone at Atlantic Institute of Oriental Medicine

Dr. Zhang;

My name is Allyson Wilson. I am a student in the first class of the DAOM program at Atlantic Institute of Oriental Medicine. I am working on my Capstone: Acupuncture as an Adjunct Therapy to Solution Based Psycho-therapy. I am doing a Pilot Study using Zulingqi, Waiguan and Auricular Point Zero. The test subjects are diagnosed with General Anxiety Disorder and Repetitive Thought Syndrome. I am working with a Therapist trained in Solution Based Therapy

with a doctorate in Psychology. She describes these patients as unable to make a decision, overwhelmed by perceived pressures from the outside, and out of balance emotionally. I have used this protocol before as part of a treatment plan and my patients tell me it feels as though I have raised a shield and they can still see everything coming at them, but it doesn't get to them and they the space they need to sort out their thoughts. For the study I am using it as a stand alone protocol.

I am writing to ask permission to use some of the charts from your lecture on NAU showing how and which neurotransmitters are effected by acupuncture.

I would also like any input, advice and direction to reference material that you might be willing to provide. My supervising instructor for this Capstone is Dr. Harry Hong.

Thank you for your attention:

Allyson Wilson

Appendix D

NIH Certificate

