SOUTH BAYLO UNIVERSITY

Effects of Acupuncture Press Seeds and Auricular Acupuncture for Anxiety & Stress: Case Series

by

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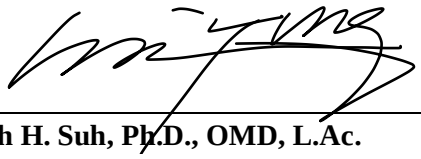

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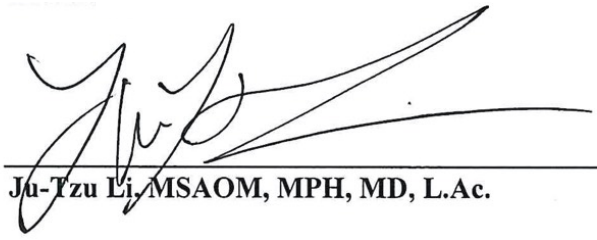

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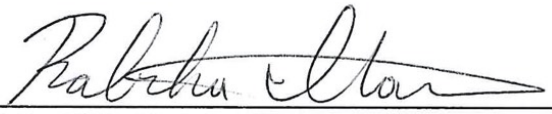

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Effects of Acupuncture Press seeds and Auricular Acupuncture for Anxiety & Stress: Case series

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ABSTRACT

Anxiety and stress have reached an epidemic worldwide, particularly in the United States. It is affecting the world's population as one of the major health issues. The purpose of this project was to collect the preliminary data on the effectiveness of acupuncture in treating anxiety and stress by using acupuncture and pressing seeds on the auricles. This study design was a case series. The participants were under an acupuncture treatment and a press seed treatment for six weeks. It consisted of five females and one male who participated in the study. All subjects responded to a Hamilton Anxiety Rating Scale (HAM-A), a series of questions designed to assess the anxiety levels. The preliminary analysis indicated a positive impact on the treatment of stress by using auricular acupuncture and press seed treatment. The subjects of this study consisted of six participants who suffered from anxiety and stress and used the auricular acupuncture and press seeds in the treatment for 30 minutes, two times per week for a total of six weeks. The participants were not taking any medication to treat their anxiety and stress and also did not have any family history. Participants were given auricular acupuncture and press seeds on Shenmen, symptomatic, kidney, liver, lung

and point zero. The mean with standard deviation of HAM-A score before treatment was 32.8± 5.71 and those after treatment were 11.0± 3.90. The difference of HAM-A scores between before and after showed 21.8± 3.66 with p -value 0.000. The values of the HAM-A questionnaires were significantly higher after 6 treatments of auricular acupuncture and press seeds and the result of this study showed that the acupuncture needling and press seeds on the ears for anxiety and stress was beneficial.

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I. INTRODUCTION

Anxiety and stress have reached an epidemic worldwide, particularly in the United States. It is affecting the world's population as one of the major health issues. A recent study by the American Psychological Association (APA) showed that American citizens are worried about stress and knew they needed to make changes. However, not too much has been done to alleviate stress or anxiety. Health care providers appeared not to be very interested in making behavioral or lifestyle changes to alleviate stress. The study showed that 20% of Americans considered their stress to be high or extreme and that 69% of those 20 percent claimed that their stress had increased over the past years, compared to 35% that claimed an increase in stress over the past years. Forty-six percent of the respondents believed that it was extremely important to discuss lifestyle changes that could improve their health. Yet 25% still had the confusions about managing their stress and anxieties with their health care providers, and only 22% believed that their health care provider assisted them in making lifestyle or behavioral changes to relieve stress (APA, 2013). Stress is known as a leading cause of exacerbating and increasing certain serious health issues such as anxiety, insomnia, muscle pain, high blood pressure, a compromised immune system, heart disease, depression, and obesity (Sapolsky, Romero, & Munck, 2000).

There are two major stress forms, physical and emotional. The difference between acute and chronic stress is far between them. Physical stress can be from being exposed to sun, cold, humidity, exercise, lots of work, sex, or even a person's underlying disease. Emotional stress tends to be caused by our ability to respond to stress (Sapolsky, Romero, & Munck, 2010).

Depending on the severity of the stress, how each person handles stressful situations and whether the individual is already overwhelmed by other stressors, and chronic stress, lead to a weakening of the body and generally lead to health problems (Harvard Medical School, 2003). Can stress be positive? The answer is yes since the primary purpose of the stress process is survival. Stress can be considered to be an adaptive mechanism that has existed since the beginning of time.

The adaptive aspect of stress has been referred to as "the fight or flight" mechanism. Its purpose is to give our body the necessary boost to either flee from a threat or to directly confront and fight the threat. The stress will potentially make us stronger, according to the toxicology principle, called hormesis, before negative effects occur from stress or toxins. Exercise, for example, is a form of physical stress. If an individual begins to lift weights, he or she will begin to grow stronger. However, if an individual over-exercise, then the individual will start to see a plateau and then a decline in weight gain if it persists.

The same principle applies to our immune system. Bacteria and viruses can cause our immune system to become weaker or stronger depending on the individuals. If we are too weak or exposed to strong pathogens, our immune system may not be able to defend itself (Mattson, 2008). Human beings are most often recommended by doctors to take prescribed medicines that have side effects, which may further put more stress on the body, leading to additional stress and poor health. However, recently more doctors started to recommend alternative therapies or supplements to prescription drugs, such as Tai Chi, yoga, hypnosis and cognitive training (NIH, 2010).

Traditional Chinese medicine has been used as an alternative for treating acute and chronic stress by using herbal formulas, acupuncture, meditation, and exercise (Tai chi, Qi gong, or Dao yin). Among those, one specific form of acupuncture is to apply needling or press seeds on the acupuncture points located on the ears, called “auricular acupuncture”, “auricular therapy” or “auricular medicine”, introduced by Dr. Li Chun Huang who had been working in the Beijing Military Hospital for over 35 years before coming to the United States(Huang, 2005). She is the world's top specialist in auricular medicine and one of the top acupuncturists in China according to what she claimed. Practitioners typically use acupuncture needles and then apply press seeds on ears after acupuncture treatment to allow the patients to maintain the treatment effects between clinical visits. Dr. Li Chun Huang and Dr. William Huang, the researchers and practitioners, primarily used ear acupuncture and pressing seeds treatment in their practice. The methods used in auricular medicine include acupuncture needles, magnets, press seeds, laser, injections, etc. In her private practice, Dr. Li Chun Huang used press seeds in auricular medicine only and had been doing so for over 40 years (Huang, 2005).

There were papers written about the auricular acupuncture points mostly for post-traumatic stress disorder PTSD (Golden, 2012). Nevertheless, in those papers, only acupuncture needles were used, or they used other modalities instead of body needles in the case of battlefield acupuncture. The findings in those papers determined that auricular acupuncture and press seeds may be effective. Not many studies could be found in English to validate the claims of Dr. Huang. However, clinically, this technique may potentially help people to relieve their anxiety and help them recover from some of their stress-related health problems.

Some research has been conducted on stress and anxiety in the human body from both western and TCM perspectives. However, auricular therapy, including auricular acupuncture and auricular press seeds, could be the promising TCM therapies. Not many studies regarding the effects of auricular acupuncture and auricular ear seeds on patients suffering from anxiety has not been published at least in English publications. Therefore, there is a need to collect the preliminary data regarding the effects of auricular acupuncture and ear seeds for the treatment of anxiety and stress.

Objective

The objective of this study is to collect the preliminary data on the effects of auricular acupuncture and press seeds for anxiety and stress. Hopefully, through this work, the results from this study will allow the TCM community to have a better understanding of the effects of auricular acupuncture and press seeds for treating their patients with anxiety and stress.

Definition of terms used in the current study

Adrenal Point: An auricular point located at the center of the lower part of the outer border of the Targus. This point is used to regulate the function of the adrenal glands and diminish stress (Huang, 2005).

Anxious point: An auricular point located on the ear lobe in the center of area[7]. It is used as the main point for diagnosing and treating emotional disorders, such as anxiety and stress (Huang, 2005).

APA: American Psychological Association.

Auricular Therapy: A form of TCM stimulating the ear (auricular) points for treatment of the body's conditions, based on a body micro-system, and utilizing four major nerves of the body. Most notably one is the vagus nerve (Huang, 2005).

Be Happy Point: An auricular point located at the corresponding point of the anxious point on the posterior surface of the auricle. It is a major point for treating emotional disorders, such as anxiety and stress (Huang, 2005).

Ear Center (AKA Vagus Nerve Point/Point Zero):

An auricular point located at the lower edge in the middle area of the Helix Crus, which regulates the function of the internal organs. Locate this point by dividing the ear in half horizontally and vertically. This will be located in the center of those two divisions (Huang, 2005).

Heart: An auricular point located in the depression at the center of the Cavum Concha, which tonifies the heart and relieves anxiety or mental restlessness (Huang, 2005).

Hormesis: A term used by toxicologists to refer to a biphasic dose response to an environmental agent characterized by a low dose stimulation with a beneficial effect and a high dose with an inhibitory or toxic effect (Mattson, 2008).

Hypothalamic- Pituitary- Adrenal axis (HPA Axis): The interactions among the hypothalamus, pituitary, and adrenals constitute the HPA Axis, also known as the LHPA Axis (Limbic- Hypothalamic -Pituitary-Adrenal). This is a major part of the neuroendocrine system that controls reactions to stress and regulates many body processes, including digestion, the immune system, mood and emotions, sexuality, and energy storage/expenditure (Lescheid, 2011).

Liver: An auricular point located at the lateral inferior area of the Cymbal Concha. It removes the stagnation of liver Qi, improves the function of the gallbladder, invigorates the function of the spleen, regulates the vital functions of the stomach, invigorates the flow of Qi and blood in the meridians, and stops pain (Huang, 2005).

National Acupuncture Detoxification Association (NADA): An organization utilizing auricular therapy for helping people to detox from substance abuse (National Acupuncture Detoxification Association, n.d.).

Occiput: An auricular point located at the midpoint of the line on the exterior antitragus going from the temple to brain stem. The distance between temple and occiput is the same as that between temple and forehead. It can be used to tranquil the mind (Huang, 2005).

Post-Traumatic Stress Disorder (PTSD): A type of anxiety disorder which is brought from experiencing an extreme emotional trauma, involving the injury, or the threat of injury or death (American Psychiatric Association, 2000).

Press Seeds: A form of ear therapy in Chinese medicine. It consists of either a seed or metal ball attached to a small piece of adhesive bandage that is taped to specific points on the ear for specific treatments (Huang, 2005).

Shen Men: An auricular point located on the ear in the triangular fossa. It tranquilizes the mind and helps regulate the nervous system (Huang, 2005).

SSRIs: Selective serotonin reuptake inhibitors or serotonin-specific reuptake inhibitors, a class of compounds, typically used as antidepressants in the treatment of depression, anxiety disorders, and some personality disorders (Henry & Demotes-Mainard, 2006).

Sympathetic: An auricular point located on the ear at the end of the upper edge of the lower crus of the antihelix. It regulates the function of the autonomic nerves (Huang,2005).

Literature Review

Overview of Stress

A detailed literature review was completed to grasp the Western and Eastern perspectives on stress and anxiety. The literature review was performed primarily based on stress, depression, and auricular acupuncture, mainly found at the South Baylo University Library, in the databases of PubMed and EBSCOhost websites. The literature search used the search terms: “stress”, “anxiety”, “anxiety and stress”, “treatment of stress”, “western treatment of stress”, “TCM treatment of stress”, “auricular acupuncture”, and “auricular ear seeds”. This section illustrated the concepts, physiological mechanisms and stress assessment of stress. It explored the perspectives of western medicine and TCM in terms of stress and anxiety.

Definition of Stress

Stress is defined as a force or influence that is restrictive. One aspect of stress is its status as a physical, chemical or emotional factor that causes tension in the body or mind and can be a factor in causing and/or exacerbating the disease. Another aspect of stress is the state of the presence of a stressor, especially a state of bodily or mental tension resulting from factors that tend to alter existing equilibrium. From the above definition, one can discern that stress on the body can be physical (trauma, cold, heat, etc.), chemical (chemotherapy, household toxins, radiation, etc.), or emotional (anger, worry, fear, etc.). Each type of stress can contribute to diseases. The definition above also explains that stress can put tension on the body, which in turn can create more stress. The self-sustaining cycle of stress can be deadly, since it may lead to severe health conditions, and even to suicide

(Holmes, 1997). The original Hans Selye stress model below demonstrated how the stress cycle works.

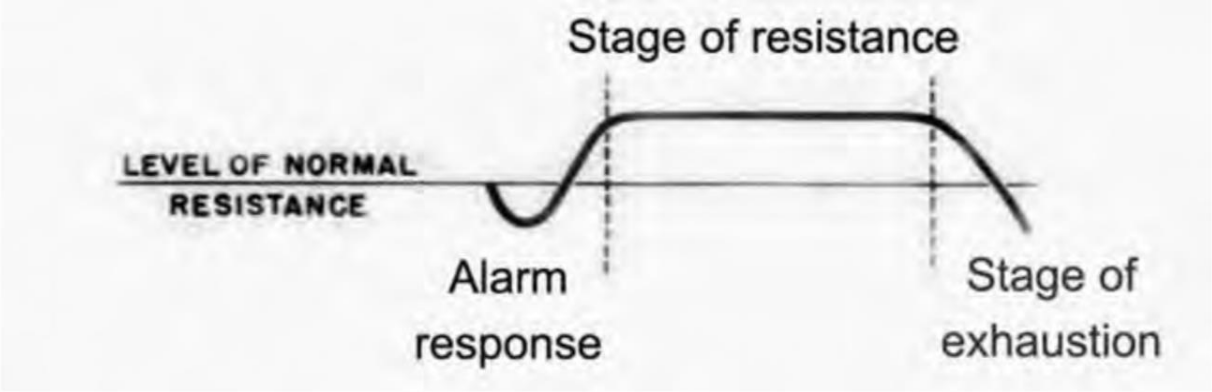

Figure 1. Hanse Selye model of stress

http://psychology4a.com/stress%202.htm

The Importance of Focusing on Stress

Stress is a gateway to other major complications of the human body. Stress often impacts society as a whole. Examining the financial and health costs associated with stress will highlight the effect of stress on society. According to various online stress studies, healthcare costs for stress-related conditions were over $300 billions each year in United States. 69 percent of the recorded high stress has reported an increase in tension over the past year, according to the APA study released in 2013. The costs to the individuals and the society will continue to rise (APA, 2013).

The Measurement of Stress

Stress is a subjective force that uniquely manifests in each person. One person can experience and be highly stressed by an event, while another one is not at all bothered. There are several ways to discern if a person is under stress. First, most obvious self-perception of stress is recorded by each person. Second, stress can be discerned from the physical and psychological forms by standardized measurements. Quantitative instruments can be used to calculate stress loads on the body in addition to each person's perception toward stress levels. Quantitative instruments can also be used as a way to assess stress on the body. The third method used to measure is through clinical research in the laboratory testing's. Through this testing, serum cortisol is a substance that could be released by the adrenal glands when a person is stressed when the flight or fight mechanisms are kicking in. Cortisol levels in the body follow a cycle that includes a morning peak at approximately 7 am and a drop throughout the day as shown in the figure below.

This variation is likely to change over time if the person works at night (Borkin & Stuppy, 2000).

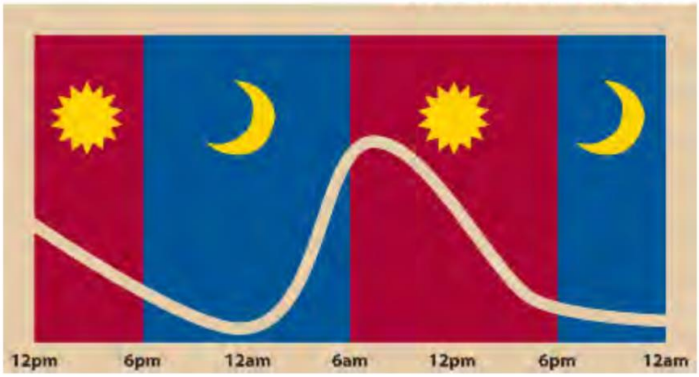

Figure 2. Circadian Release of Cortisol

http://nickelridge.ca/health-blog/cortisol-sleep/

Hormesis

Hormesis is defined as a concept that indicates the potential benefits of stress potentially. Similarly, the term of hormesis is mainly used in biology and psychology. The basic argument of hormesis is that the stress that does not kill an individual can make him stronger. Generally, the concept of hormesis is based on toxicology (Mattson, 2008). This concept argues that when there is a low dose of toxin, the body benefits from this, but a higher dose is deadly. In addition to that, it is factual to say that a little stress is essential for the body but when more problems arise, human beings tend to be overwhelmed by the

stress either chronically, acutely or even both. A perfect example is the concept of hormesis which could be observed during exercise. When a person carries out a little activity, the body becomes healthier, and he becomes stronger. On the other hand, if a person does not do exercise, the body begins to break down, and its adaptability is reduced. Therefore, hormesis is seen when the conditioning and strength of a person who exercised reach its maximum point then decreases and this further leads to potential injury.

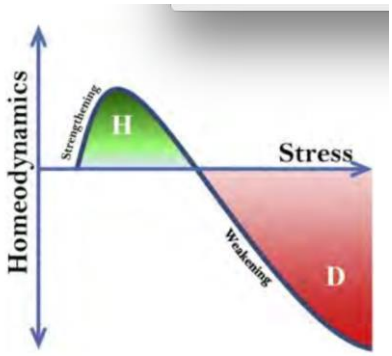

Figure 3. Hemodynamics of stress

http://sureshrattan.com/category/researchs/c37-hormesis/

Western Medicine Perspectives on Stress

About 20 years ago, Robert Sapolsky began studying to look at the effects of stress through the act of measuring cortisol and epinephrine levels in baboons living in Africa naturally. Sapolsky made different observations that were notable. The first was that when

an animal escaped a situation that could even lead to death, its stress response reduced, and the animal went back to normal. However, this is different from human beings (Sapolsky, 2010). When they are in danger, and the situation may affect them negatively. They cannot shut off the switch as quickly as it occurs in animals and the stress response continues.

In addition to that, the observation that the stress level of human beings were partially based on the psychological levels. People can come up with stressful situations that occur in their minds only. For example, they may fear to ask another person for a date, and they end up not asking, which leads to the stress developing in them. In this case, the body does not know that there is no attack that takes place against itself and this results in a stress response that occurs physically within the body of a human being (McEwan & Lasley, 2002). However, there is a primary problem in which individuals take part in this cycle repeatedly where they may worry if a lover is cheating, if he or she will achieve a high or low mark in the examination, or how he should deliver a speech publicly when asked to do this. Eventually, the stress response in human beings is more damaging than the actual stressors.

Traditional Chinese Medicine Perspectives on Stress

Traditional Chinese Medicine recognizes the effect of stress on the body organs including gallbladder, bladder, heart, kidneys, large intestine, liver, lungs, pericardium, small intestine, stomach, and spleen. Additionally, stress is known to affect blood either in the form of deficiency or blood stasis and also directly to the heart blood, and liver blood (Maciocia, 2005). The Chinese medicine defines stress as Liver Qi Stagnation. Liver Qi controls the smooth flow of Qi in the body. When a person is under stress, it may lead to irritability and increased stress levels (Lyttleton, 2004).

TCM Treatment of Stress

Treatment is approached from different angles including using Chinese herbal medicine and acupuncture. Acupuncture, for instance, has attracted a lot of studies on its effectiveness in treating pain and relieving stress (Chen & Chen, 2008). Another unique application of TCM is auricular medicine where the ear acupuncture points are used in diagnosing and treating the various health conditions (Hollifield, 2007).

Literature Review on Integration of Western Medicine and TCM

In both perspectives toward to stress, Western and Eastern treatments have both created their own experiences and ways of the factors of stress. TCM treatment for stress has developed auricular acupuncture as a method of relieving stress. Though, there are no large studies that have compared the outcomes of acupuncture and auricular acupuncture for treatments of stress.

II. MATERIALS AND METHODS

2.1. **Research Design**

This case series design engaged a pre/post experimental study method. That is suitable as a preliminary small sample study. This study is designed to provide preliminary information regarding the effectiveness of using acupuncture needles and press seeds on the ears for the treatment of anxiety and stress. The use of the pre/post experimental study method is appropriate for this study as it involves the direct application of treatment with pertinent measures being taken both before and after treatment.

The American Psychological Association stress study was used as a source to look at the population with the highest levels of stress [2]. In this study, the author focused on the category that was identified as having the highest stress levels in previous research. People of all ages who were identified as high- stress groups were eligible to participate this study. The strata flyer (Appendix 2) was used to recruit participants. The participants who met the criteria for inclusion completed the informed consent form (Appendix1).

2.2. **Selection Criteria of Participants**

Inclusion Criteria: The participants were voluntary patients with the diagnosis of anxiety who visited the medical office located in the Burbank, CA from May 2019 to August 2019, furthermore the patients were informed of the purpose of this study. People in all ages, races, genders were accepted.

Exclusion Criteria: The participants excluded from this study were pregnant patients, the patients with skin conditions, patients with family history of Anxiety, and the patients undergoing other treatments such as psychotherapy or taking psychiatric medications.

2.3. **Protocol**

Attending weekly therapy sessions for six consecutive weeks are directed to the participants who were treated with auricular acupuncture needles and press seeds. The participants receiving acupuncture and press seeds were invited to attend an additional session to study the pre- and post-treatment intervention if they desired. Each participant was committed to a maximum of 6 weeks involvement to complete the study including the initial interview with paperwork, and the final post-study review. The participants were treated with auricular acupuncture needles and press seeds, two times per week for six weeks, at the following auricular points: Shenmen / Point Zero / Liver / Kidney / Adrenal Gland / Sympathetic.

The participants had 30 minutes of treatment two times per week for six weeks, a total of 12 acupuncture and press seeds treatments were performed. For evaluation, the HAM-A questionnaire was used before and after the last treatment. The participants did not receive any other therapy methods such as the Cupping, Electronic Acupuncture, Moxa, Gua Sha etc.

The choice of these points is based on Dr. Li Chun Huang's protocol. However, by removing a few points and adding the adrenal point, the researcher modified the protocol. For data analysis, with the consultation of a statistician, the data was analyzed from the study. Data were derived from the results of Hamilton Anxiety Rating Scale (Appendix 3).

The needles used in this study were manufactured by DBC, and all needles were stainless steel and sterilized. All needles were disposable and every needle used during this study was disposed into the biohazard sharps container immediately after every treatment. Every needle was handled as recommended and regulated by CCAOM CNT 7_{th} Manual.

The study was designed to understand the effects of auricular acupuncture needles and press seeds on anxiety and stress. HAM-A questionnaires were given before the first treatment and after completing treatments, then results were analyzed.

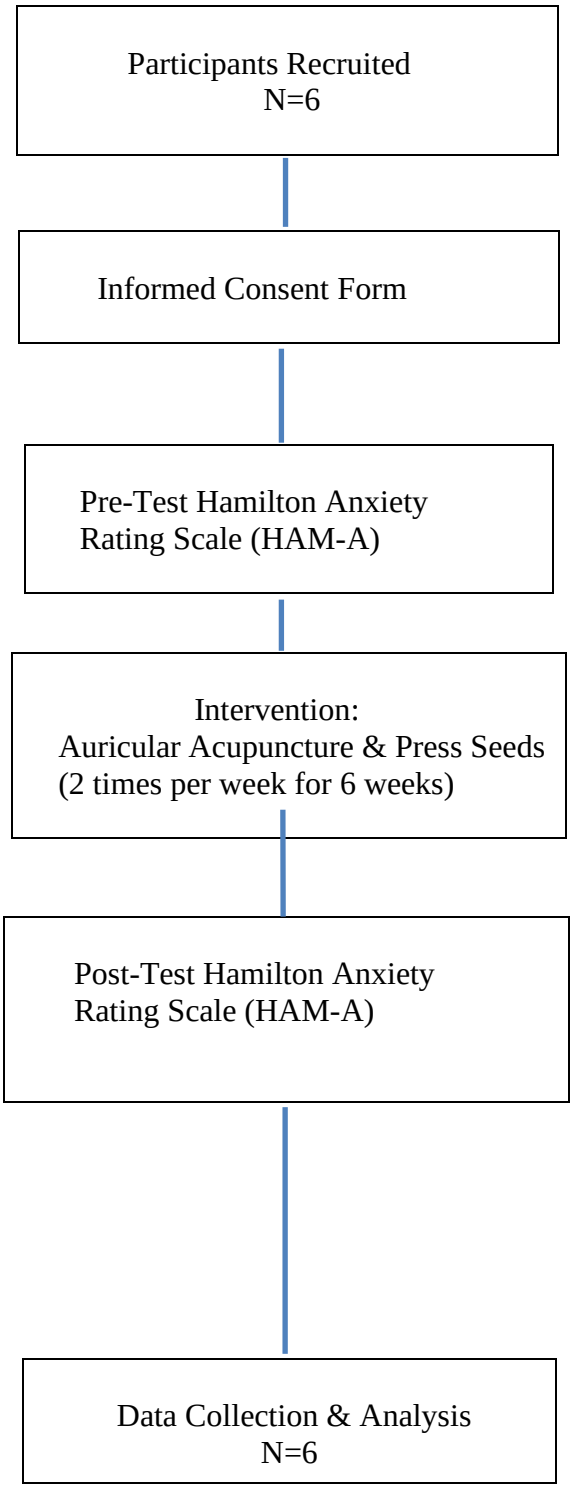

Figure 4. Flow Chart of the Study Process

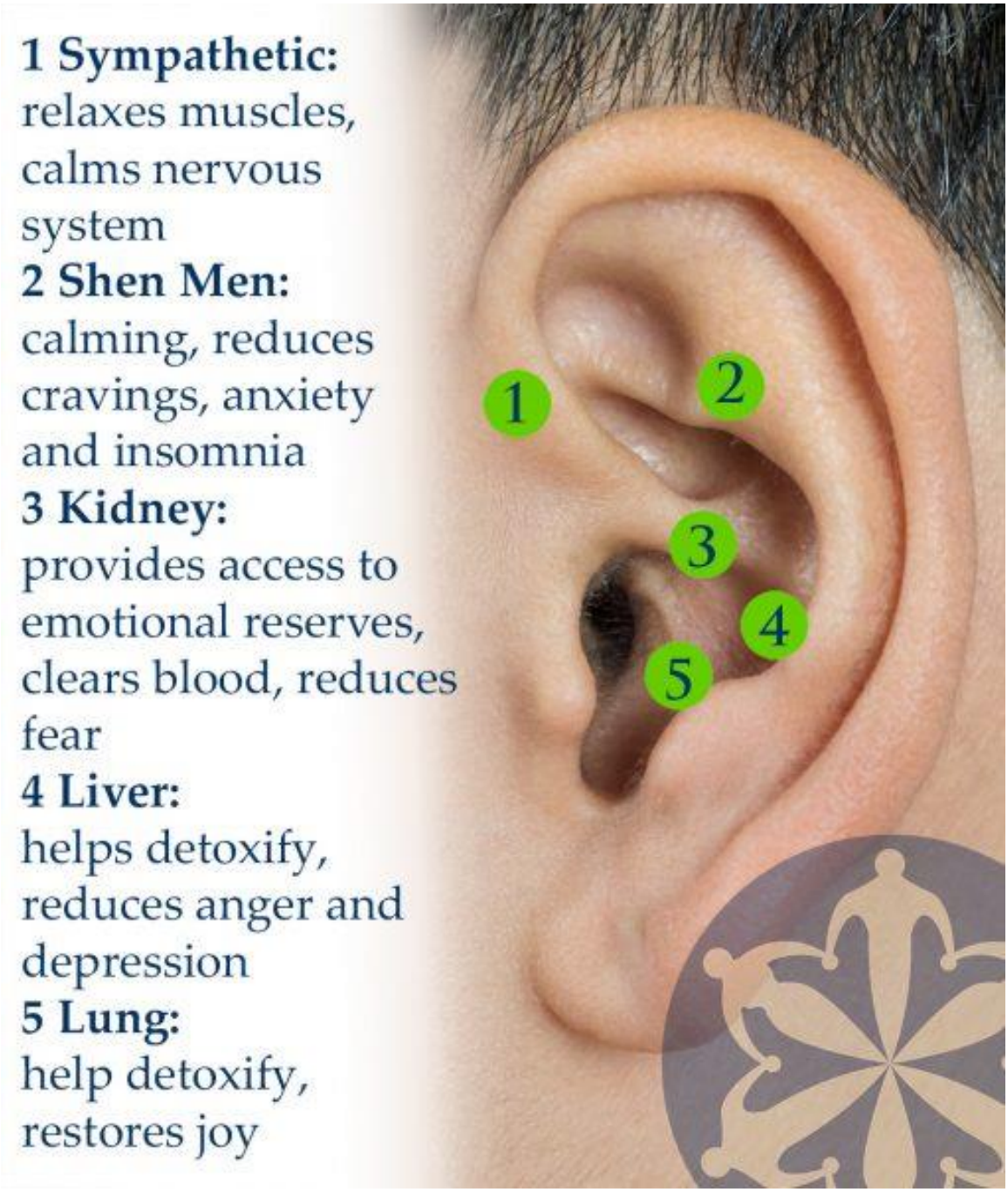

Figure 5. Locations and Actions of Auricular Acupuncture & Press Seeds

http://Summitstonehealth.org

Table 1. Locations and Actions of Auricular Acupuncture Point and Press Seeds

1. ACUPUNCTURE point	Point Zero
LOCATION	In the notch on the helix root as it rises from concha ridge
INDICATIONS	General homeostatic balance, general balance point for all treatments, used in battlefield ear acupuncture (neurogate of ear shenmen)
2. ACUPUNCTURE POINT	Sympathetic
LOCATION	Intersection of the superior border of the inferior crus of anti-helix and medial part of the helix
INDICATIONS	Use for numerous diseases related to disruption in autonomic (both sympathetic and parasympathetic) nervous system. It is used as strong analgesic and providing relaxant effect upon internal organs. It can relax muscles and calm nerves system.
3. ACUPUNCTURE POINT.	Kidney
LOCATION	In the cymba of conchae, above the small intestine point
INDICATIONS	It is a strengthening point, which is beneficial to the cerebrum, hematopoietic system, access to emotional nerves, clears blood, and reduces fear.
4. ACUPUNTURE POINT	Liver
LOCATION	In the cymba of conchae, above left hepatomegaly area.
INDICATIONS	Help detoxify and reduce anger and depression
5. ACUPUNCTURE POINT	Adrenal Gland
LOCATION	At the prominence on inferior part of targus
INDICATIONS	Stimulates adrenaline and adrenocortical hormones and help hyper/hypotension affect the dilation or constriction of blood vessels.

6. ACUPUNCTURE POINT. Shen Men	
LOCATION	Anti-helix upwards to where it splits into an upper and lower branch.
INDICATIONS	Master point and is used with many other ear points for treating anxiety, depression, insomnia, pain, addiction and for detoxification.

In Table 1, six auricular acupuncture points were used in treatment of anxiety and depression with needles and press seeds.

2.4. **Outcome Measurement**

Hamilton Anxiety Rating Scale (HAM-A)[5] was used as an outcome measurement that assessed the levels of symptoms the participants had. The responses included the choices of the severity of symptoms as 0 (not present), 1(mild), 2 (moderate), 3 (severe), and 4 (very severe). The questionnaire of HAM-A was attached in Appendix 3.

Figure 6. DBC Needles and Ear Seeds

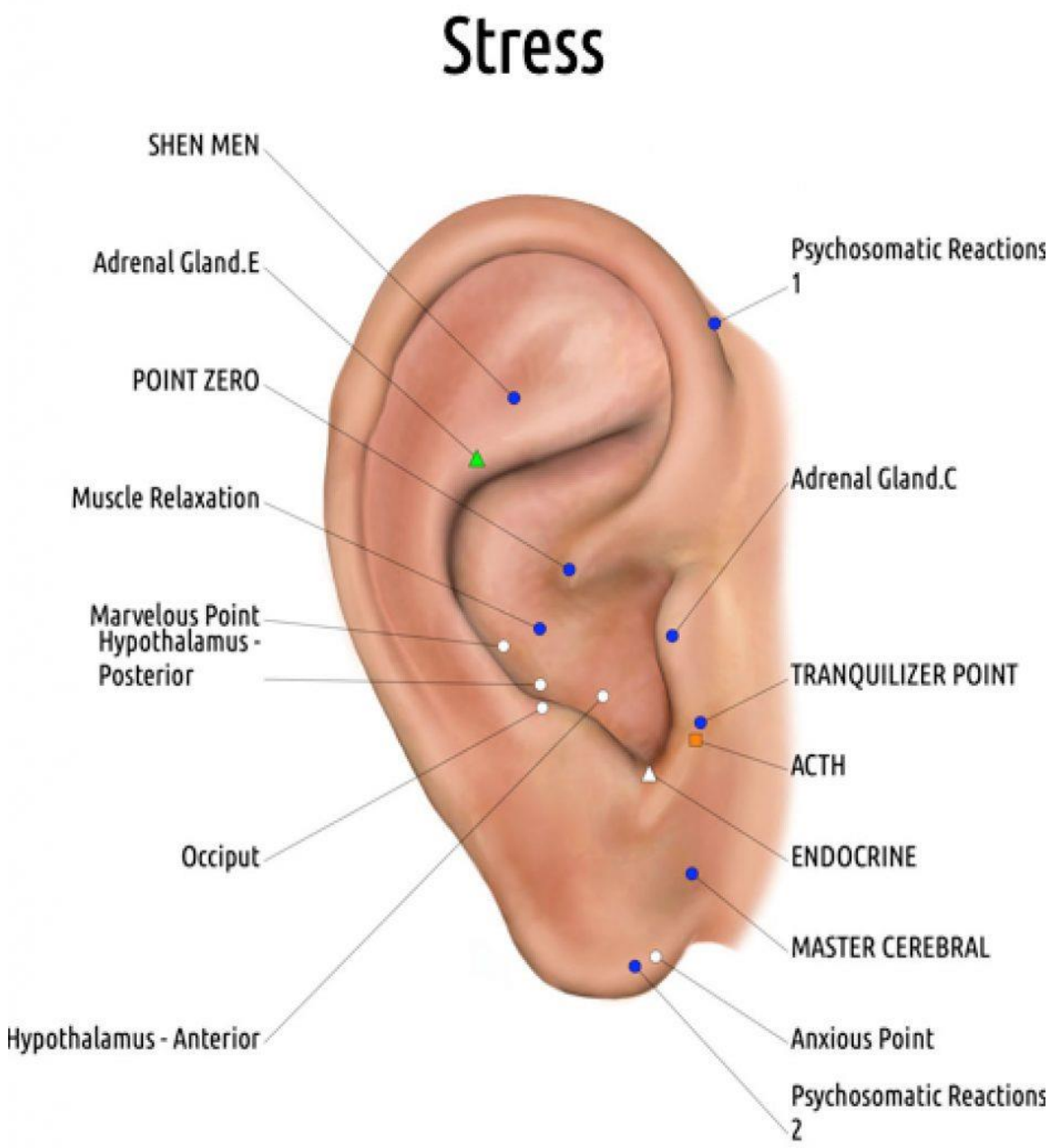

Figure 7. Locations of Auricular Acupuncture Points for Stress
Http:// dive-portal.org

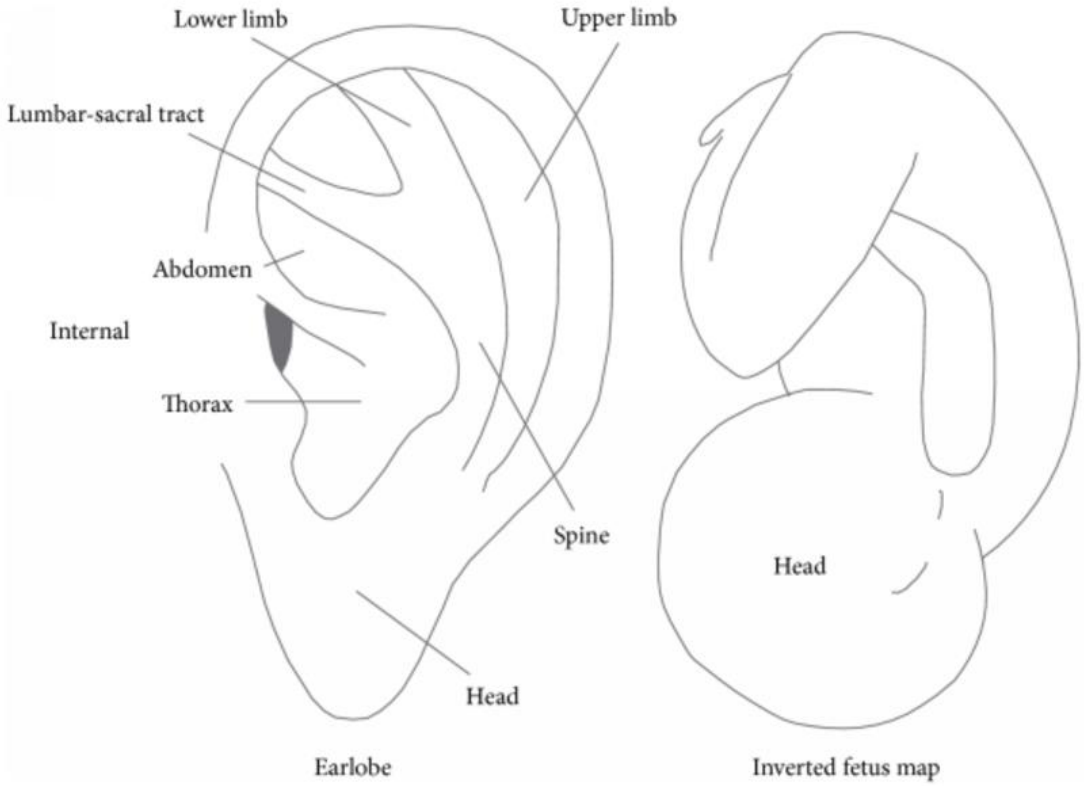

Figure 8. Ear Map as Like an Inverted Fetus

http://Researchgate.net

Figure 9. Auricular Acupuncture Needles

Http://Shape.com

Figure 10. Auricular Ear Seeds

Http:// Healthline.com

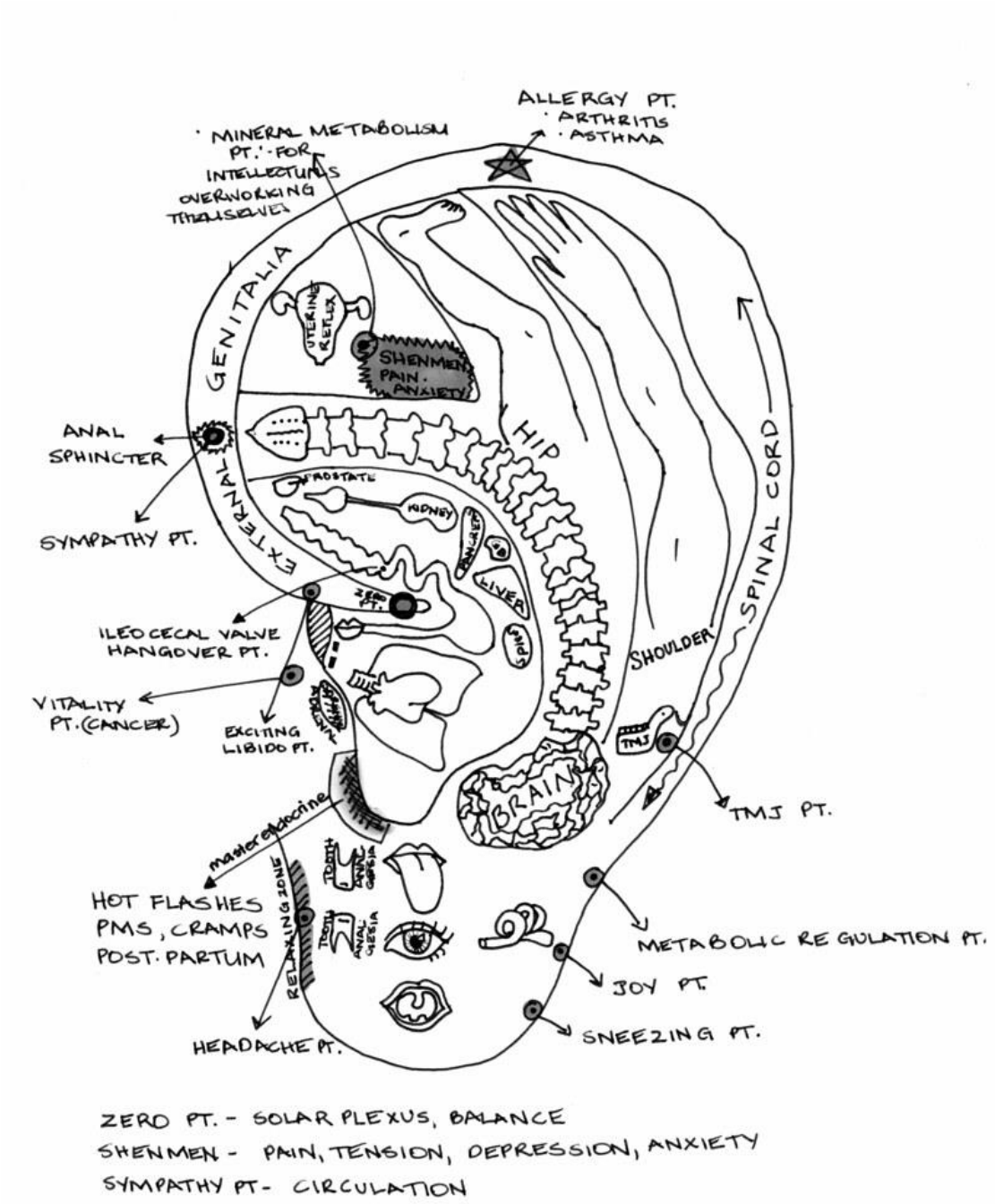

Figure 11. Ear Reflexology Map

Http:// Flickr.com

III. **RESULTS**

This research gathered demographic data as well as pre and post -treatment data from the individuals on the effectiveness of acupuncture and press seeds for the treatment of anxiety and stress. The number of subjects involved in this study was very limited. It was not possible to perform any parametric inferential statistical analysis. Six participants were examined with the mean age of 55.3 ears and the mean HAM-A score of 32.8±5.71 before treatment and mean HAM-A score of 11.0±3.90 after treatment on HAM-A with a difference of 21.8±3.66 and p-value is 0.000.

The difference is to compare HAM-A before treatment to HAM-A after treatment for those who were treated with auricular acupuncture and auricular press seeds. There were five females and one male in the study. All of the participants lived in Los Angeles and were either working or household wives or retired. Pre and post data were summarized as follows, regarding the pre and post- treatment outcome measures of HAM-A. The data of HAM-A were summarized in Table 2, and Figure 12-14. The results from all participants showed there was an improvement after treatments (as shown in Table 2).

The mean value of HAM-A (the anxiety and stress questionnaire) was higher before treatment than that after the treatment. The value decreased from 32.8 ± 5.71 to 11.0 ±3.90 after treatment showing a decrease of 21.8 ± 3.66 (difference). The difference in HAM-A was significantly high (*p*-value = 0.000). On Figure 14, Boxplot of HAM-A before and after each treatment demonstrated a significant difference. Figure 13 showed a Bar Graph of a mean of HAM-A, and Figure 12 showed the score of Bar Graph of HAM-A of all cases, in which there is no overlap on the graph that demonstrated a significant difference

between before & after treatments. Analysis on the questionnaires showed that acupuncture needles and press seeds on ears for the treatment of anxiety and stress were beneficial.

Table 2. Characteristic of Participants (Gender and Age) and HAM-A

			HAM-A			
ID	Gender	Age	Before Tx	After Tx	Difference	Rate (%)
Case1	Female	62	37	14	23	41.07
Case2	Female	58	36	16	20	35.71
Case3	Female	58	33	12	21	37.50
Case4	Male	54	22	6	16	28.57
Case5	Female	48	32	7	25	44.64
Case6	Female	52	37	11	26	46.43
Mean		55.3	32.8 ± 5.71	11.0 ± 3.90	21.8 ± 3.66	39.0 ± 6.53
p-value					0.000*	
Cohen's d					4.46**	

* Paired Samples t -Test
** Large in effect Size

Definition of Cohen's d (CD)

$$Cohen's\ d = \frac{M2-M1}{\sqrt{(SD1^2+SD2^2)/2}}$$

M1: Mean of HAM-A After Tx, M2: Mean of HAM-A Before T
SD1: Standard Deviation After Tx, SD2: Standard Deviation Before Tx

CD < 0.2	Negligible
CD < 0.5	Small
CD < 0.8	Medium*
Otherwise	Large**

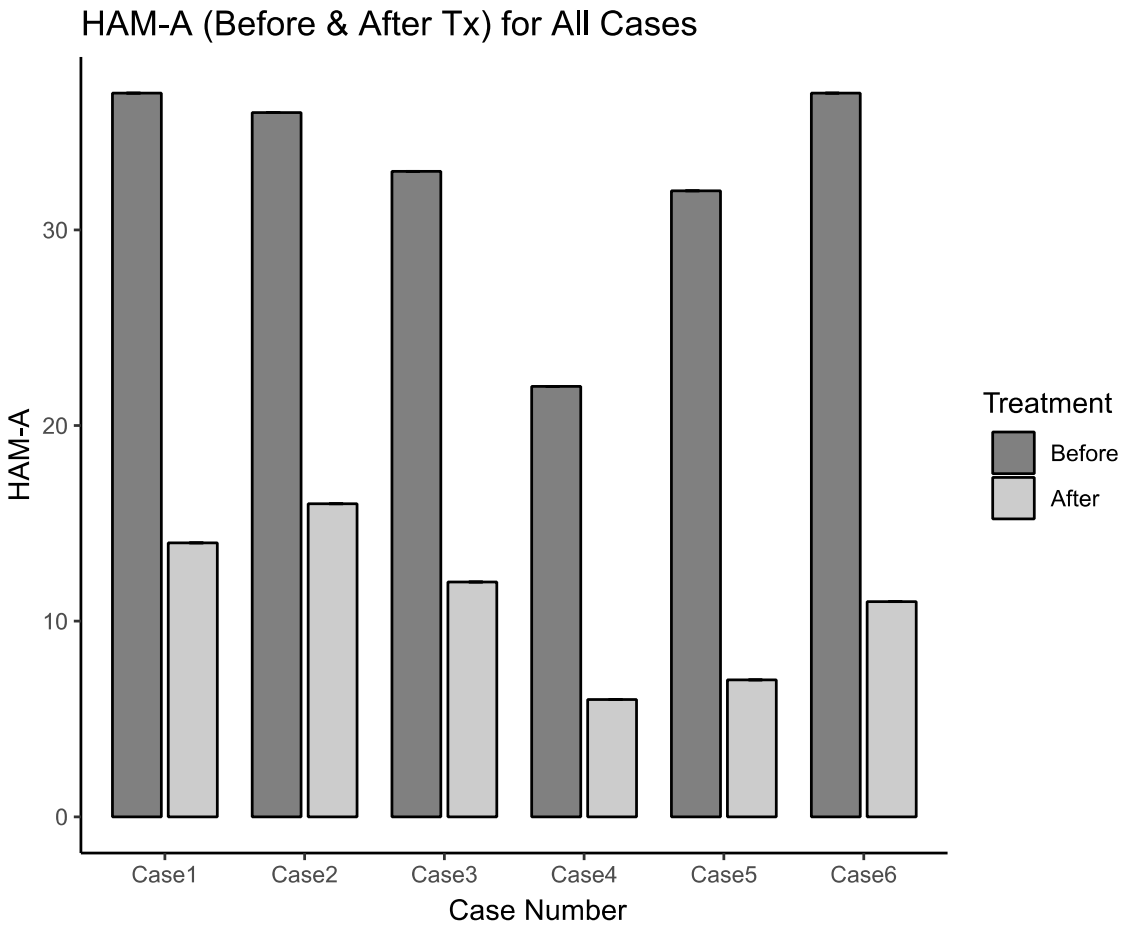

Figure 12. Bar Graph of HAM-A of All Cases.

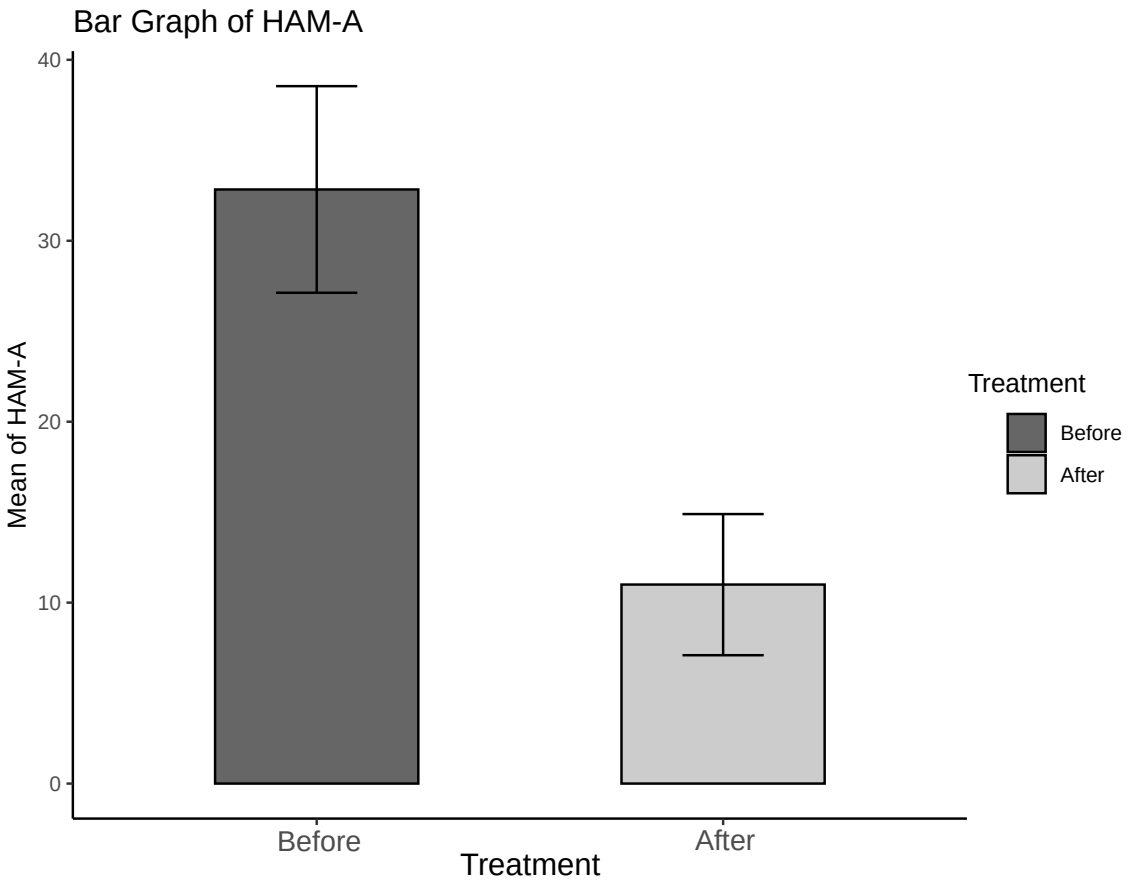

Figure 13. Bar Graph of the Mean of HAM-A

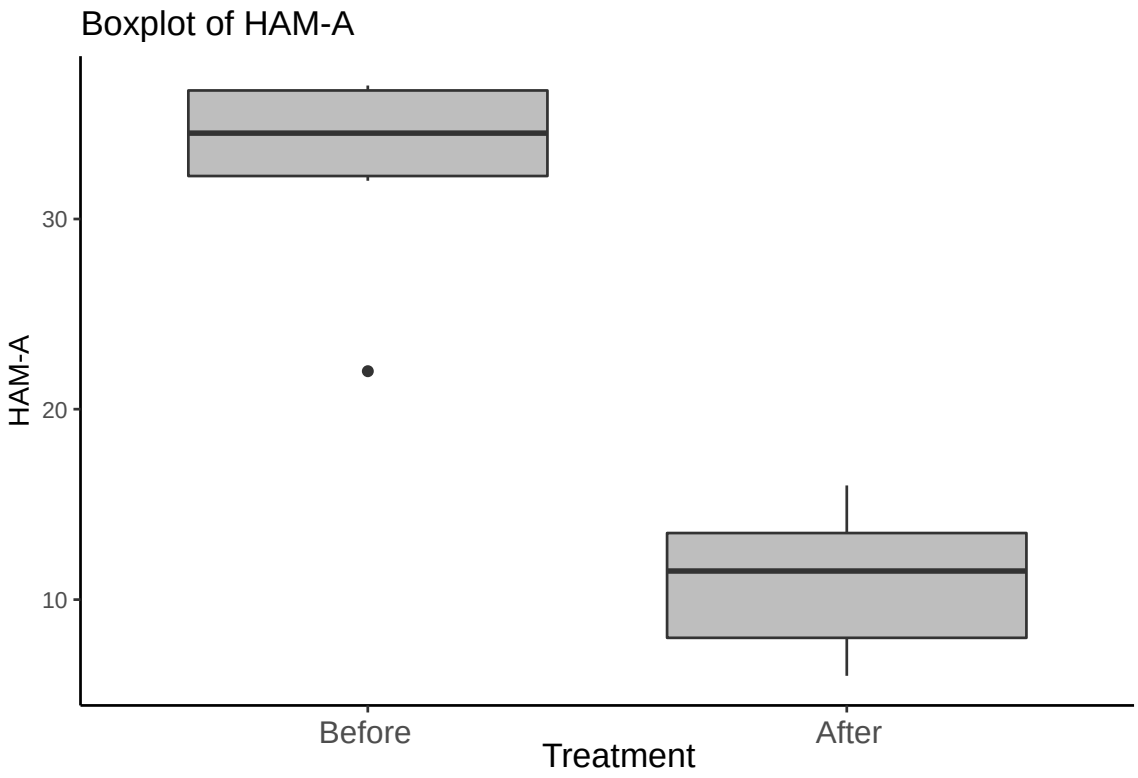

Figure 14. Boxplot of HAM-A

IV. DISCUSSION

As a result of analyzing participants response data and questionnaires, it has been shown that auricular acupuncture needles and press seeds can be used to treat stress and anxiety beneficially. Auricular acupuncture ear seeds may have a better outcome when they were used together.

The results of this study may suggest that TCM schools should consider the use of press seeds as a routine part of clinical therapy processes for the patients with the stress/anxiety in addition to acupuncture needling. The combination of both methods may have a better outcome in treating patients with stress and anxiety disorder.

4.1. Implications for Practice

The next question should be discussed is what these preliminary results might mean for modern practice and how acupuncturists can apply these findings in their practice. Although the current study did not actually have a sufficient number of subjects to generate definitive conclusions, it is nevertheless important for practitioners to derive some practical suggestions from this study. The findings from the current study suggest that anxiety and stress management may be beneficial by using pressing seeds and auricular acupuncture together.

4.2. **Limitations of the Current Study**

The current study is limited by several factors including the subjects who participated in the study were from a different ethnicity. This study is limited by the small sample size, the short recruitment period, and resource limitations of a doctoral project. Another limitation was the data was generated in one location (Burbank, Los Angeles, California). The timing of the participants' visits to the clinic was different. Also, the stress levels and the severity of anxiety in the participants varied.

4.3. **Further Research**

The results of the current study are based on the subjective observation and self-reports by the participants, and further advanced research would be needed to complete a series of studies that examine various factors that could further prove or disprove the original hypothesis regarding the effectiveness of acupuncture and ear seeds for stress & anxiety.

V. CONCLUSIONS

This study was conducted in six participants using auricular acupuncture points and press seeds for anxiety. HAM-A values improved in all participants after treatments. The HAM-A values before the treatment were higher than the values after treatment. The values decreased after treatments which is significant (p-value is 0.000). The study showed from the analysis, the mean HAM-A appeared improved in all cases (before treatment as of 32.8 ±5.71 and after treatment as of 11.0 ± 3.90 with a difference of 21.8 ± 3.66 and p-value of 0.000). Use of both auricular acupuncture and press seeds is beneficial for relieving anxiety and stress.

Based on this study with six participants using auricular acupuncture followed by applying press seed, it was helpful to relieve stress and anxiety. The study with inadequate number of participants and a lack of the control group was hard to get a definitive conclusion, as it was mentioned in the limitation section. However, the results were promising which may be applied in the practice.

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Appendix 1

South Baylo University

Informed Consent Form

You are invited to participate in a research study about _____ [name of the research project].

The goal of this research study is to _____ [the purpose of the research project].

This study is being conducted by _____ [names of investigators]. There are ___ [number of qualified researchers] qualifications to participate in this study: (1) _____; (2) _____; [and continue as needed].

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. Whether you choose to participate or not, all the services you receive at this clinic will continue and nothing will change. If you choose not to participate in this research project, you will be offered the treatment that is routinely offered in this clinic. You may change your mind later and stop participating even if you agreed earlier.

Participating in this study may not benefit you directly, but it will help to enrich the knowledge on _____ [field of the research].

By participating in this research, it is possible that you will be at greater risk than you would otherwise be. There is, for example, a risk that your condition will not get better and that the new medicine or treatment doesn't work even as well as the old one. If, however, the medicine or treatment is not working, we will give the medication or treatment routinely offered to make you more comfortable. While the possibility of this happening is very low, you should still be aware of the possibility.

The information you will share with us if you participate in this study will be kept

completely confidential to the full extent of the law. The information that we collect

from this research project will be kept confidential. Information about you that will be collected during the research will be put away and no-one, but the researchers will be able to see it. Any information about you will have a number on it instead of your name. Only the researchers will know what your number is, and we will lock that information up with a lock and key. It will not be shared with or given to anyone except

_____ [name who will have access to the information, such as research sponsors, DSMB board, your clinician, etch].

If you have any questions about this study, please contact

_____ [names of PIs], at _____ [phone numbers] and _____ [email addresses]. If you have any questions or concerns regarding your rights as a subject in this study, you may contact Dr. Jae Jong Kim, Chair of the South Baylo University Institutional Review Board, at jaejong-kim621@gmail.com or 213-738-0712.

YOU WILL BE GIVEN A COPY OF THIS FORM WHETHER OR NOT YOU AGREE TO PARTICIPATE.

Certificate of Consent:

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked to have been answered to my satisfaction. I consent voluntarily to participate as a participant in this research.

Print Name of Participant_____

Signature of Participant _____

Date _____
Day/month/year

Statement by the researcher/person taking consent:

I have accurately explained the information sheet to the potential participant. I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the participant.

Print Name of Researcher/person taking the consent_____

Signature of Researcher /person taking the consent_____Date _____
Day/month/year

Appendix 2

ARE YOU UNDER STRESS?

DO YOU EVER feel OVERWHELMED?

You are not alone!

If you are like the majority of Americans, then you are probably experiencing stress that leaves you feeling constantly overwhelmed – even during the times you at your job.

If so, then you may be prefect for participating in a study for the treatment of stress using the natural, safe, and effective method of acupuncture.

Katia Siri, LAc. Of Medical office is looking for people interested in participating in a six weeks acupuncture study on the effectiveness of Anxiety and stress. By participating you may experience lower stress levels, notice a reduction of body fat.

Katia Siri has completed her Masters in Acupuncture and traditional Chinese Medicine, but now is working on this study for completion of her doctoral studies as a Doctor of Acupuncture & oriental Medicine (DAOM).

Looking for all ages, working full time or not working, or if you are under the care of a psychologist, you may qualify to this study. Call the Office (818-845-2492)

Insomnia, Trauma, Burnout, Fatigue

Call to the office now!!

What have you got to lose?

2020 North Glenoaks Blvd., Burbank, CA, 91364

Call (818)625-2202 to schedule an appointment or consultation

Acupuncture- Chinese Herbology- Auricular Medicine- Medical Qi Gong

Stress Study Information

Thank you for your consideration in my study on the treatment of stress.

As you have read before, the majority of Americans are experiencing physical and emotional symptoms that they can accumulate at home.

This study is designed to help acupuncturists like myself, determine the quickest and most effective way to treat stress.

My name is Katia Siri LAc. and I am a Licensed acupuncturist in the state of California. I am conducting this study as part of my doctoral dissertation through the south baylo university of Traditional Chinese Medicine in Los angles, California, and completely confidential.

If you would like to be part of the study, here is what you need to do:

-Fill out the form below to Schedule an interview.

-At the interview, all question will be answered, and it will be determined if you qualify to be part of this study

-If you qualify, you will be asked to review and sign an Informed consent form, which will summarize all the study, including what you need to do to participate.

Financial Considerations

-you will not receive any financial compensation for your participation, nor is there any cost to participate within this study.

-if you are interested in being part of this study, then fill out the required information below so that we can set up an interview, and for you to complete the preliminary stress survey.

Appendix 3.

Hamilton Anxiety Rating Scale (HAM-A)

Below is a list of phrases that describe certain feeling that people have. Rate the patients by finding the answer which best describes the extent to which he/she has these conditions. Select one of the five responses for each of the fourteen questions.

0 = Not present, 1 = Mild, 2 = Moderate, 3 = Severe, 4 = Very severe.

1 Anxious mood [0] [1] [2] [3] [4]

Worries, anticipation of the worst, fearful anticipation, irritability.

2 Tension [0] [1] [2] [3] [4]

Feelings of tension, fatigability, startle response, moved to tears easily, trembling, feelings of restlessness, inability to relax.

3 Fears [0] [1] [2] [3] [4]

Of dark, of strangers, of being left alone, of animals, of traffic, of crowds.

4 Insomnia [0] [1] [2] [3] [4]

Difficulty in falling asleep, broken sleep, unsatisfying sleep and fatigue on waking, dreams, nightmares, night terrors.

5 Intellectual [0] [1] [2] [3] [4]

Difficulty in concentration, poor memory.

6 Depressed mood [0] [1] [2] [3] [4]

Loss of interest, lack of pleasure in hobbies, depression, early waking, diurnal swing.

7 Somatic (muscular) [0] [1] [2] [3] [4]

Pains and aches, twitching, stiffness, myoclonic jerks, grinding of teeth, unsteady voice, increased muscular tone.

8 Somatic (sensory) [0] [1] [2] [3] [4]

Tinnitus, blurring of vision, hot and cold flushes, feelings of weakness, pricking sensation.

9 Cardiovascular symptoms [0] [1] [2] [3] [4]

Tachycardia, palpitations, pain in chest, throbbing of vessels, fainting feelings, missing beat.

10 Respiratory symptoms [0] [1] [2] [3] [4]

Pressure or constriction in chest, choking feelings, sighing, dyspnea.

11 Gastrointestinal symptoms [0] [1] [2] [3] [4]

Difficulty in swallowing, wind abdominal pain, burning sensations, abdominal fullness, nausea, vomiting, borborygmi, looseness of bowels, loss of weight, constipation.

12 Genitourinary symptoms [0] [1] [2] [3] [4]

Frequency of micturition, urgency of micturition, amenorrhea, menorrhagia, development of frigidity, premature ejaculation, loss of libido, impotence.

13 Autonomic symptoms [0] [1] [2] [3] [4]

Dry mouth, flushing, pallor, tendency to sweat, giddiness, tension headache, raising of hair.

14 Behavior at interview [0] [1] [2] [3] [4]

Fidgeting, restlessness or pacing, tremor of hands, furrowed brow, strained face, sighing or rapid respiration, facial pallor, swallowing, etc.