

Case report of Treatment for Generalized Anxiety Disorder (GAD) using Classical Chinese Medicine and Modern Scalp Acupuncture.

Abstract

This is a case study about diagnosing and treatment for Generalized Anxiety Disorder (GAD) using modern scalp acupuncture and Classical Jing Fang (Dr.Hu XI Shu's lineage). After 1 visit and 1 week of herbal treatments, the patient showed significant improvements. By the third visit and two weeks of herbal treatment, she had a few days in a week where she had no anxiety and felt "normal".

Introduction

According to CAMH, The Center of Addiction and Mental Health, in any given year, one in five Canadians would experience a mental illness, and by the time Canadians reach forty years of age, one in two would experience, or have had, a mental illness.¹ In the *Diagnostic and Statistical manual of Mental Disorders*, generalized anxiety disorder (GAD) is defined as an anxiety disorder characterised by excessive, uncontrollable and often irrational worry about events or activities.² People with GAD display excessive, perhaps irrational, anxiety or worry for at least six months, about a number of things such as work, family, personal health as well as social interaction that seem to be nothing for someone but is disturbing to the person. This fear and anxiety may be the extension of simple emotional stress but can cause significant problems in areas of life. The symptoms of GAD include:

- Feeling of restlessness
- Being easily fatigued
- Having difficulty concentrating or focusing
- Mind going blank
- Being irritable
- Having muscle tension associating with emotional stress
- Difficulty controlling feelings of worry
- Having sleep problems³

Theodore A Stern, in his *Massachusetts General Hospital Comprehensive Clinical Psychiatry*, explains that the pathophysiology of GAD is an active and ongoing area of research often involving the intersection of genetics and neurological

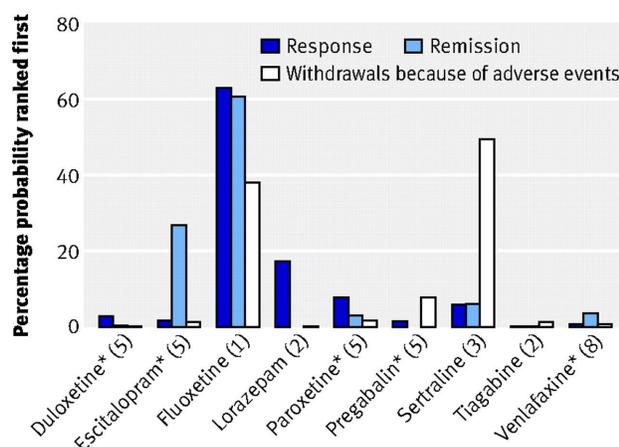
¹ camh. Mental Illness and Addiction: facts and statistics. [cited 2020 Dec 05]. Available from <https://www.camh.ca/en/driving-change/the-crisis-is-real/mental-health-statistics>

² Diagnostic and statistical manual of mental disorders; DSM-5 (5th ed). Washington, D.C.: American Psychiatric Association. 2013 p.222

³ "What is generalized Anxiety Disorder?", National Institute of Mental Health. [cited 2020 Dec 05]. Available from <http://www.nimh.nih.gov/health/topics/anxiety-disorders/index.shtml>

structures.⁴ A research study that conducted in 2009 provides new insights in which intra-amygdala abnormality and engagement of compensatory frontoparietal executive control network is related to the pathomechanism of GAD. In the research, the researchers concluded that the basolateral complex processes the sensory-related fear memories and communicates information regarding threat importance to memory and sensory processing in other parts of the brain such as medial prefrontal cortex and sensory cortex.⁵

Traditionally GAD is treated with both psychotherapeutic and pharmacological intervention.⁶ David Baldwin, who is a professor of psychiatry and honorary consultant psychiatrist at University of Southampton in UK conducted a systematic review of the literature on the treatment GAD, and compared the efficacy (response, remission and withdrawal due to adverse events) of nine pharmacological drugs. Within the nine drugs, Fluoxetine has the best response result with probability of 62.9%, and Lorazepam follows with less than 20% of probability. Seven drugs out of nine drugs had less than 10% of probability. Sertraline had the best tolerability of 49.3%, which had the lowest percentage of withdrawals. Seven out of nine drugs had less than 10% of tolerability.⁷



Anxiety and Traditional Chinese Medicine

Traditional Chinese Medicine (TCM) treats Anxiety. In TCM “Qi” is an important concept. Qi translates as “air” and figuratively as “material energy”, “life force”, or “energy fow”.⁸ Qi, and the function of Qi is the foundation of Chinese Medicine. Although Qi is an unverified concept, for Chinese Medicine practitioners as well as martial arts practitioners, it is experienced as real. Another important concept of Chinese Medicine is that it is holistic. Holistic approach does not see a body as a collection of parts, but

⁴ Stern, Theodore A, Massachusetts General Hospital. “Anxiety Disorders (Chapter 32)”

Massachusetts General Hospital Comprehensive Clinical Psychiatry, Elsevier, 2016, London

⁵ Etkin, Amit, MD, PhD, Katherine E Prater, Alan F. Schatzberg, et al, “Disrupted Amygdalar Subregion Functional Connectivity and Evidence of a Compensatory Network in Generalized Anxiety Disorder”. *Arch Gen Psychiatry*, 2009; 66 (12) 1361-1372

⁶ Patal, Gayatri, Tonya L Fancher, “In the clinic. Generalized Anxiety disorder”, *Annals of Internal Medicine*, 2013, 159 (11)

⁷ Baldwin, David, Robert Woods, Richard Lawson, et al, “Efficacy of drug treatments for generalised anxiety disorder: Systematic review and meta analysis” *the bmj* 2011; 342: d1199. [cited 2020 Dec 05]. Available from <https://doi.org/10.1136/bmj.d1199>

⁸ Lee, M.S, H.M Pittler, E Ernst, “Effects of reiki in clinical practice: a systematic review of randomised clinical trials”. *International Journal of Clinical Practice*. 62 (6) 947-54

rather it sees a body as a complete and whole system, in which one particular organ or a part of a body cannot be discussed without being in a large context of the body system. Holistic view of the body also includes mind and spirit, which means that issues of mind or emotion cannot be discussed without the wellness of the body. The concept of Yin and Yang is equally important in Chinese Medicine. It is the two opposite polarities of the spectrum which are interconnected and interdependent to each other. Essentially, what Chinese medicine practitioners do in the clinic is aiming for the best balance of the patients' Yin and Yang.

In TCM, which is the most orthodox Chinese Medicine nowadays, anxiety in general has six types: Heart Qi Deficiency, Heart and Kidney Yin Deficiency, Heart Blood and Spleen Qi Deficiency, Heart Qi and Yin deficiency, Heart and Gallbladder Qi Deficiency as well as Phlegm Heat.⁹ In TCM, Heart is not just an organ to pump the blood out, but also is an organ to govern one's emotion. When one's Heart is deficient in its Qi and the Blood (in TCM, the Blood host the emotion) emotional imbalance will occur. The Kidney and the Heart has Yin and Yang balance, which means the Heart and the Kidney's balance is important for overall wellness of the body. In TCM, when the Heart cannot contain the spirit (Shen), the Shen is easily agitated and can cause anxiety.

Anxiety and Classical Chinese Medicine

Classical Chinese Medicine (CCM) or *Jing Fang* is a school of Chinese Medicine that came before the second half of the Han Dynasty (220BCE -). In this case report, the methods of diagnosis and treatments were from *Shang Han Lun* (The Treaties of Cold Damage) as well as *Jin Gui Yao Lue* (The Essentials from the Golden Cabinet) written by *Zhang Zhong Jing*,¹⁰ specifically the lineage of Hu Xi Shu. In *Jing Fang*, anxiety is a result of Ben Tun. Ben Tun is a pathological action of a body. When a body is invaded by external pathogens such as a common cold or flu, a healthy response of a body is sending Antipathogenic Qi (*Zheng Qi*) to the area of the body that is above the diaphragm. However, if the body has preexisting undigested substances in the digestive tract (pathogenic dampness), the upsurging movement of the *Zheng Qi* will take the turbid dampness with it to the chest, throat, face and all the way up to the brain. When the turbid dampness enters the brain, it fogs the frontal cortex of the brain causing anxiety. Ben Tun essentially is a concurrent syndrome of Exterior (like a common cold) and Interior (poor digestion). The treatment principle for Anxiety according to *Jing Fang*

⁹ Maclean, Will, Jane Lyttleton, "Clinical Handbook of Internal Medicine: The Treatment of Disease with Traditional Chinese medicine", University of Western Sydney Macarthur, 1998, Campbelltown

¹⁰ Although it is called The Treaties of Cold damage, it is absolutely wrong to think *Shang Han Lun* is only for the Cold Damage related. *Zhang Zhong Jing*'s book was long lost in China until Wang Shu He discovered it later on. Wang Shu He did not have the foundation of the Classical Chinese Medicine, and recompiled with his addition in it, and named it *Shang Han Lun* only because the first chapter was about *Shang Han* syndrome.

is 1) descending Ben Tun down, 2) resolving Exterior issues, and 3) strengthening the digestive system.

Case:

Female: 66 years old. First consultation November 2020

Chief complains: Anxiety (GAD), fear, overwhelmingness, insomnia

History: The patient always had a tendency of over thinking, but with the Covid-19 pandemic, she developed debilitating anxiety and fear.

Physical observation: very slim, she seems to be slightly agitated

Associated symptoms

- Tremor, Shortness of the breath, palpitation with anxiety
- Knot feeling in stomach with anxiety
- Feeling of pressure at the base of pelvis (cystitis) with anxiety
- Overthinking
- Excess thinking disturb her sleep
- Sadness
- Overwhelmingness
- Mental agitation
- Scattered brain
- Inability to relax
- Anxiety is worse in the night time
- Excess thoughts disturbing her sleep
- Vivid dreams
- Once wake up in the middle of the night (for any reason), cannot go back to bed
- Tachycardia
- Muscle cramp 1-2 times a week
- Lack of sweat in general
- Itchy eyes with environmental allergy
- Occasional knee pain
- Disliking Wind
- Cold hands and feet
- Poor Night vision
- Disliking strong lights, prefer dim
- Poor appetite for breakfast
- Occasional bloating with wrong food
- Thirst for room temperature, like to sip
- Frequent, incomplete, cloudy urination
- Slightly burning sensation with urination but different from UTI
- Hard stool without magnesium supplement

- Occasional incomplete and sticky bowel movements
- Menopause at age 45
- Tongue: pale swollen tongue body, teeth mark, some white tongue coating
- Pulse: slightly choppy

Diagnosis: Tai Yang, Shao Yang, Yang Ming, Blood deficiency

Formula 1: Chai Hu Jia Long Gu Mu Li Tang

Formula 2: Suan Zao Ren Tang

Modification: Bai He

Acupuncture:

Scalp: DU20, frontal needling x 3 (DU24 and one each in both side), GB8 modified x 2 in both side

Body: GB20, Anmian, REN12, REN 6, REN 4, ST25, ST 21 (L), PC6 (L), SJ5 (R), LI10 modified, ST36, LI4, LR3, SP6, SP10

Electric Stimulation: Frontal needle to GB8 modified in both side

Analysis:

- Tai Yang - Exterior symptoms - Anxiety (ben Tun), occasional knee pain
- Shao Yang - poor appetite for breakfast, thirst for room temperature
 - It is the Half Exterior Half Interior Yang pattern. It is a minor symptom but poor appetite in the morning itself is a good enough reason to diagnose with Shao Yang. It is basically heat in the upper part of the body and cold in the lower part of the body.
- Yang Ming - excess multiple thoughts, vivid dreams, slight burning sensation in urination
- Tai Yin - the most severe in her, overwhelmingness, knots with anxiety, occasional bloating, cystitis with anxiety, urination issues, stools issues
- Blood deficiency - anxiety is worse in the night time, sleep issues, muscle cramp, choppy pulse
- She was given standard dosage of Chai Hu Jia Long Gu Mu Li Tang with higher dosage of Fu Ling, one dose for one day. Chai Hu Jia Long Gu Mu Li Tang is a formula for Tai Yang, Shao Yang, Yang Ming, Ben Tun concurrent syndromes. It will descend the heat in the upper part of the body down, nourish the stomach, calm the emotion down, and treat urination issues.¹¹
- She was given standard dosage of Suan Zao Ren Tang, one dose for three days. It is to nourish Blood in her upper part of the body to treat Insomnia and

¹¹ Feng Shi Lun, Suzanne Robidoux, "Six Syndrome Guide to Classical Formulas, Shang Han Za Bing Lun Hu Xi Shu Lineage, 2018, Beijing, China

palpitation as well as tachycardia, multiple thoughts disturbing her sleep and vivid dreams.¹²

- Acupuncture is combined modern scalp acupuncture and traditional body acupuncture.
- Scalp acupuncture was given in the temporal and frontal area.
 - The scalp acupuncture method was established from Lin Xue Jian¹³
 - Frontal area - At The center of the anterior hairline, use one cun needle (0.25 x 0.30) towards DU20
 - 2cm lateral of the DU line, 2cm posterior of anterior hairline, use the same size of needle towards the insertion of the first needle in both sides.
 - Temporal area - 1cm anterior and 1cm posterior of GB8 towards inferior, 2 needles parallel to each other in both sides
 - Electric stimulation - positive on the temporal, clipping two needles together, and negative on the frontal needles on both sides.
 - Intermittent pulse with 2.5hrz



Second Visit (one week later):

She said that the anxiety is still there but with much less intensity. Other associated symptoms are also in general improved. The anxiety and symptoms did not go away completely, just the severity and frequency were improved. Frequent and incomplete urination did not see noticeable improvement. Her stools also did not improve as much as other symptoms, and it remained sticky. These two information

¹² Same as above

¹³ Introduced in "Scalp Acupuncture for Neurological and Psychiatric Diseases and Disorders/Chinese Medicine for Parkinson's Disease" with Dr. Suzanne Robidoux, PhD., CM, L.Ac. held at the Michener Institute of Applied Sc, April 13-15, 2018, Toronto

were suggesting that pathogenic dampness in the lower area of the body remained. In her stomach, the bloating did not see the improvement only because the patient avoided food that gives her.

- Same acupuncture treatment was repeated
- Chai Hu Jia Long Gu Mu Li Tang was repeated with same dose
- Suan Zao Ren Tang was repeated, but was given one dose for two days. (increased)
 - Cang Zhu 15g was added

Third Visit (one week later)

She said since the second treatment to the day of the third visit, she had 2 days that she did not have any anxiety. In general everything was continuously improving. Her sleep has also improved except the day of the second treatment. The excess thinking and frequent urination improved but still remain.

- REN12, REN 6, REN 4, ST25, ST 21 (L), SJ5, LI10 modified, ST36, GB34, LI4, LR3, SP6
 - Electric stimulation was weakened.
- Chai Hu Jia Long Gu Mu Li Tang was repeated with same dose
- Suan Zao Ren Tang was repeated, but was given one dose for two days. (increased)
 - Fu Ling was increased 30g
 - Cang Zhu was decreased 10g
- She was advised to come in two weeks.

Discussion:

Frontal scalp needling in this style aims to descend Ben Tun down. Ben Tun is Internal pathogenic dampness sent up to the frontal part of the brain causing overthinking, anxiety, or even obsessive thinking tendency. It is because abilities to identify, express and manage emotions are governed and improved within the frontal lobe. It is this frontal lobe that constructs what we call “emotional intelligence.”¹⁴

From the view of CCM, anxiety essentially is an issue of the brain caused by poor digestive ability. Scalp acupuncture is very effective to descend the Ben Tun down. Classical acupuncture has been using scalp acupuncture points such as DU20. However, scalp acupuncture that is associated with the brain anatomy has been

¹⁴ Rosso, Isabelle M, Ashley D. Young, Lisa A. Femia et al, “Cognitive and Emotional COmponents of Frontal Lobe Functioning in Childhood and Adolescence”, *Ann. N. Y. Acad. Sci* 1021: 355-362, 2004, NY

developed in China since the 1970s.¹⁵ The body acupuncture treatments on this patient aim to improve her digestive system and release the pathogenic factors from the exterior layer. Her digestion was actually not too poor to start with. It is slightly dry, seeing in the poor appetite in the morning and bloating with wrong food. She also had healthy habits, good understanding of nutrition and willingness to change her diet to achieve her goal. The treatments were effective, but it was significant that she also made reasonable efforts to improve herself.

Conclusion

She will need a few more treatments to consolidate the improvements, however, the integration of CCM herbs, classical body acupuncture and modern scalp acupuncture was extremely effective to treat GAD without any adverse reaction. The efficacy of the combined treatment is fast and safe.

Future Study

GAD is very common among children and adolescents. Further case reports of treatments for GAD among the youth will be extremely important.

¹⁵ History of Acupuncture in Neuro-Acupuncture Institute [cited in Dec06, 2020] available from <https://www.neuroacupunctureinstitute.org/education/history-of-scalp-acupuncture-continued.html>