

COMBINING NAPRAPATHY WITH JIN SHIN JYUTSU

AS A

TRAUMATIC BRAIN INJURY TREATMENT

A CASE STUDY REPORT

FEBRUARY 1, 2021

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ABSTRACT

The aims of this case study are to investigate the means and effectiveness of the integration of two hands-on complementary/alternative medicine modalities (naprapathy and Jin Shin Jyutsu), as a treatment strategy to improve the rehabilitation of a 46-year-old woman with traumatic brain injury.

The subject of the case study had a history of multiple traumatic brain injuries starting in early childhood (on several occasions she lost consciousness from the head injury), and continuing until the age of 44, resulting in a history of seizure disorders throughout her life. She now has significant, progressive physical, language and cognitive disabilities and disorders, including ataxia and dysphagia. For this study the patient received 20 treatments. Each was of one-hour duration and consisted of an amalgamation of naprapathy manual work, (mainly spinal adjustment and some joint mobilizations), and Jin Shin Jyutsu energy work. Before and after every session the patient was presented with several pre-post treatment tests, including a short memory test, fine and gross muscle control test, muscle activation and strength tests.

While the observations at this point are anecdotal, this case study report suggests that an amalgamated treatment strategy of these two complementary alternative modalities, Jin Shin Jyutsu and naprapathy, can be supportive and beneficial in improving rehabilitation and prognosis for a patient with severe symptoms caused by traumatic brain injury. Further studies need to be conducted to explore the effect that sustained weekly or daily multidisciplinary interventions could have on the rehabilitative course in cases of severe traumatic brain injury.

IMPORTANCE OF THIS STUDY

The importance of this study is:

- 1) To provide a model and assess its efficacy for integration of two complementary/ alternative medicine modalities in treatment of traumatic brain injury.
- 2) To provide a model and assess the efficacy of integrating naprapathy and Jin Shin Jyutsu in treatment of traumatic brain injury.
- 3) To introduce the value of naprapathy as a healing art system of manipulative therapeutics that can be effectively integrated in rehabilitation strategy with other medical and complementary health practices in treating of traumatic brain injury.
- 4) Demonstration of non-pharmacological hands-on treatment as a cost-effective rehabilitative approach. (This may further reflect on naprapathy's efficacy potential in treating many other health challenges.)

ACKNOWLEDGMENTS

First and foremost, I would like to hugely thank and appreciate Natalie, (last name kept for privacy) the subject of this study, for not just agreeing to participate in the study but for bravely, with an open mind and heart, and proactively diving into our work together. Often providing important insights into the physical, mental and emotional aspects of her experience with traumatic brain injury, she has been a tremendous resource for this study and for the therapeutic community at large.

I'd like to thank Dr. Nuzzo, Dr. La Vista and the Southwest University of Naprapathic Medicine (SUNM), for recruiting me into the program, challenging me and at the same time supporting me until my arrival at the doorsteps of completing my studies and the thesis I present here. I'd like to express gratitude to Dr. Dominique Alò for her patient, generous and meticulous feedback and for the guidance elevating this work to a higher academic standard. I am grateful to Dr. Kristi Bordelon for being very responsive, positive and supportive throughout my time in SUNM and in the production of this study. I would like to recognize and thank Dr. Denise Gabaldon-Thronas, for stepping in as an adviser for the study and being such a positive presence in SUNM. I applaud Janice Zoller, Melissa Sisneros and Karen Benavente for their consistent availability and assistance in whatever and whenever was needed, and of course, am deeply grateful to Dr. Tony Zayner, who has been a force of expertise during my three years in SUNM.

A special thanks and appreciation to my dear friend, Dr. Daniel Silverman, who helped me conceive this project. His continuous and generous professional and editorial support has been of great value to me.

Thanks to my honorary sister, Donna Dahrouge, for her help with data processing and to my loved friend, Robert Graifman, for being a willing reader, viewer and reviewer, providing me with valued feedback.

To my dearest wife, Cynthia Broshi, I owe a special thanks for her professional, editorial, creative and emotional support, beginning with my decision to join SUNM and traveling with me throughout the intense three years of the program and consulting with me in the production and writing of the work I present on these pages.

And last but not the least, I would like to grandly thank my classmates and friends, Peter Campos, Caleb McVey and Dr. Travis Mason, for their camaraderie, always being together, supporting, carrying each other on and on in time of smiles and in times when things were hard.

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INTRODUCTION

There have been many studies exploring the effectiveness of different complementary and alternative medicine (CAM) modalities in treating various disorders and pains. Several of these referenced studies focus on integrative medicine, finding evidence of both safety and effectiveness when combining conventional medical treatment with the CAM modality. However, I have not found studies exploring this question: is integrating the two CAM modalities, naprapathy and Jin Shin Jyutsu (JSJ) into a unified treatment strategy an effective method of treatment?

The purpose of the study is to assess the effectiveness of combining two CAM modalities, naprapathy with JSJ, in treatment of a 46-year-old woman with traumatic brain injury (TBI). In addition, the aim is to explore the integration of modalities working with the physical (naprapathy) and the energetic (JSJ) aspects of one being, into a unified therapeutic system that addresses the mind/body connection when it has been disrupted by brain injury.

In the literature review presented below, studies (1-16) have shown the complementary alternative medical modalities, Jin Shin Jyutsu and Naprapathy, to be beneficial treatments when used alone and in integrated medical treatment protocols for different health challenges, including stroke, cancer, migraines, AIDS, back and neck pain and chronic stress. One randomized, placebo-controlled, single-blind design (11) assessed the influences of Jin Shin Jyutsu as a form of acupressure modality on cognitive flow and functional status after traumatic brain injury (TBI). Two studies (19-20), explored the efficacy of acupuncture, another CAM modality, in treating aspects of TBI. The last four studies reviewed here are included as examples of more conventional medical aspects and treatment options for TBI, with relevance to this study.

A systematic review (21) evaluated the scale and timelines of neurodegeneration in adult patients with moderate-to-severe TBI, discussing the existing evidence that moderate/severe TBI triggers various mechanisms capable of inducing prolonged neurodegeneration in humans.

METHODS AND PROCEDURES

TRAUMATIC BRAIN INJURY DEFINITION

TBI is an acquired brain injury, caused by a sudden traumatic occurrence in which the head abruptly and forcefully hits an object, or when an object pierces the skull and penetrates brain tissue, inflicting injury and damage to the brain. An individual with a mild TBI may remain cognizant or may suffer a loss of consciousness for a few seconds or minutes. Other possible outcomes including headache, confusion, lightheadedness, dizziness, blurred vision or tired eyes, ringing in the ears, bad taste in the mouth, fatigue or lethargy, a change in sleep patterns, behavioral or mood changes, and trouble with memory, concentration, attention and or thinking. Moderate or severe cases of TBI may present with these similar symptoms, along with a headache(s) that gets worse or does not resolve, repeated vomiting or nausea, convulsions or seizures, an inability to awaken from sleep, dilation of one or both pupils of the eyes, incoherent speech, weakness or numbness in the extremities, loss of coordination, increased confusion, restlessness, or agitation, loss of motor functions and more (1). Convincing evidence demonstrates that moderate to severe TBI, acts as an activator for several neurobiological processes similar to those operating in neurodegenerative diseases. However, questions about the underlying pathophysiology and clinical effects of TBI continue to be unanswered (1).

TRAUMATIC BRAIN INJURY TREATMENTS

According to the National Institute of Neurological Disorder and Stroke, TBI cases should be treated medically as soon as possible, however it is accepted that little can be done to reverse the preliminary brain damage caused by trauma. Primary concerns in terms of treatment include insuring proper oxygen supply to the brain and the rest of the body, maintaining adequate blood flow, and controlling blood pressure. Moderately to severely injured patients may receive rehabilitation that involves individually tailored treatment programs in the areas of physical therapy, occupational therapy, speech and language therapy, psychology/psychiatry, and social support (1). In a systematic review (19), the authors describe an overabundance of studies summarizing different treatments for TBI with pharmacotherapy, cell therapy, or a combination of the two. Some studies (16,17) show some promise in treating TBI with acupuncture.

TREATMENT MODALITIES UTILIZED IN THIS CASE STUDY

Naprapathy (From the Czechoslovakian; Napraviti means *to correct*, from Greek-Pathos meaning *suffering*), a health profession founded in 1907 by Dr. Oakley Smith and mainly practiced in Sweden, Finland, Norway and in the USA, is characterized by a combination of manual musculoskeletal manipulations, aiming to decrease pain and disability in the neuromusculoskeletal system (6). According to the teaching of Southwest University of Naprapathic Medicine (SUNM) naprapathy is a system of treatment by manipulation of connective tissue and adjoining structures and by dietary measures, which is held to facilitate the recuperative and regenerative processes of the body. Several scientific studies of naprapathy have been conducted in Scandinavia (6, 7, 8, 9, 10), showing naprapathy to possess therapeutic value for back, neck pain and headaches, however references to applications of naprapathy to TBI were not found in the literature.

Jin Shin Jyutsu, a term meaning "Creator's art through the person of compassion" or "Way of the compassionate spirit", was rediscovered, developed, and named by the Japanese philosopher and healer, Jiro Murai, in the early 20th century (2). Similar to acupuncture in philosophy, JSJ is an ancient art balancing the body's energy system utilizing light touch rather than needles (3). Sometimes referred to as "Acupressure", JSJ uses hand contact at specific locations on the body to harmonize the vital energy of the whole person (4). JSJ promotes proper energy circulation throughout the body, thereby decreasing physical and mental symptoms, including reducing levels of pain and stress. Repeated treatments typically result in an accumulative decrease of symptoms (5). A randomized, placebo-controlled, single-blind design study (11) shows JSJ to be of therapeutic value when impaired cognitive flow and state of being result from TBI (10).

Most often, a JSJ practitioner chooses which energy flow patterns to work with based on his/her reading of the patient's energetic pulse. Listening with six fingers on both wrists simultaneously, the trained practitioner differentiates the state of harmony of 72 foundational flows of energy and the nature of their relationships. This information leads the practitioner to energetic cause underlying the patient's health challenges and to the hands-on sequences that can help restore harmonious energy flow.

BACKGROUND INFORMATION

The subject of this case study report is a 46-year-old Caucasian woman who has a history of multiple head injuries dating from early childhood up to the age of 44. Based on a clinical examination (Montoya, S., Ph.D. , P.C. (10-1-19, 11-20-19, 12-20-19). *Neuropsychological Function Examination*. Albuquerque, NM.) there is a history of seizure disorders throughout her life resulting from head injuries and loss of consciousness on a substantial number of occasions. In the patient's words, "I had too many head injuries to count". The patient has undergone several MRIs and CAT scans which verified the conclusion that she had permanent brain lesions resulting from the head injuries. She was diagnosed by a physician with

calcification across the basal ganglia and midline of the brain. She demonstrated vascular changes from a recent head injury, which produced a transient ischemic attack (TIA, often called a mini stroke). The patient's cognitive and physical functioning has been progressively deteriorating over the course of her life causing impaired balance, loss of muscle control and gross motor skills, ataxia and dysphagia. These symptoms produced significant weight loss, heavy stuttering, issues with impulse control and problem solving and hypersensitivity to light and noise.

The patient was living in a nursing facility when first encountered for the purpose of this study. According to her testimony, she was receiving inadequate care. The facility she was housed in is focused towards elderly persons with dementia and not for an individual, such as her, who "actively seeks treatment and improvement". During her stay in the facility she lost 65 pounds of body weight. She stated that her undernourishment was strongly impairing her chance for functional rehabilitation and was impairing her mental cognitive function as well as increasing physical fatigue. She had been aware of her deterioration for some time, specifically in fine and gross motor control, short term memory and speech dysfunction.

According to the patient, she has been told she is incapable of being rehabilitated in anyway. However, she has a great desire and motivation to work hard in order to regain a better quality of life. With that in mind, this study was set in motion to assess whether tri-weekly, bi-weekly or weekly treatment, of combined naprapathy and JSJ, would support her functional recovery by improving some physical, mental and/or emotional functions.

MEASUREMENT AND OUTCOME RECORDING

The patient received twenty treatment sessions. Each treatment was of one-hour duration, all of which were an amalgamation of naprapathy manual work (mainly spinal adjustment and some joint mobilizations), and Jin Shin Jyutsu energy work (which was guided by listening to the patient's energetic pulse before and during each session). The original intention was to provide the patient with 40 sessions

with a frequency of two to three times a week, which was accomplished for the first 14 sessions (averaged 2.3 sessions a week). Due to the COVID-19 pandemic, which prevented access to the patient for over four months and the instability in her living situation and care management (please see background information and case study treatments diary for details) it became impossible to complete the full course of treatments as originally planned.

It is important to note that although my work with the patient was her most frequent therapy in the months of February and March 2020, it was not the only treatment modality she was receiving. She also received psychological and polarity (balancing the flow of energy in the body to improve or maintain health, as developed by the chiropractor and osteopath Randolph Stone) therapies. In July and August of 2020, the study's naprapathy and JSJ treatments were the only therapies the patient received.

Standard scientific technology for measurement and outcome recording (e.g. MRI) were not available for this study, so the decision was made to assess immediate functional outcomes. Additionally, because of the novelty of the study's approach, academic infrastructure (a lab, medical instruments, etc.) was not available for use. A thorough search online produced no similar studies with similarly limited resources, so precedent guidelines weren't available upon which to model this study. Therefore, it was decided to test physical and mental functions that are: 1) typically reduced or affected by TBI (specific cognitive capacities and motor control), and 2) could be assessed with minimal technology and 3) would not create undue stress for the subject. The tests were designed to be quantitatively measured and/or visually observed and recorded.

The first test was a short-term pre-post treatment memory test, in which five words (increased in the last test to six words) were read to the patient and she was asked to repeat them to the best of her ability. The results are documented and available to view (please see data chart in appendix). The next test was a writing test in order to observe the patient's fine motor control (please see hand-writing/motor control tests document in appendix). The third test assessed the patient's ability to activate her strength by pressing a hand dynamometer, the

value that appear on the instrument was recorded on the data chart. Also, her speech was observed and at times recorded on video. For the first few sessions the patient was asked to self-report her pain level and relaxation level, but later this set of questions was dropped since it was realized that the patient struggled with this self-evaluation.

RESULTS

The case study shows modest positive results when juxtaposed against the stated goals of the study, which were: To investigate the ways, means and effectiveness of the integration of naprapathy and Jin Shin Jyutsu, and to demonstrate whether an amalgamated treatment strategy of these two modalities can be effective in improving rehabilitation and prognosis for a patient with severe symptoms caused by TBI.

In all sessions that the patient was presented with pre and post-tests, she consistently produced better measurable results (Fig.1 and Fig 2.) on her post-session tests compared to the pre-session tests. Recordings demonstrate some improvement between some of the pre and post sessions in her speech capacity (please see case study notes #4, 03/08/20 and [Video #1](#)). Handwriting tests, consistently taken throughout the study, indicate a baseline improvement of motor control, evident from session #13 (03/12/20) on. (See handwriting/motor control test in appendix and [Video #2](#) from 8/23/20). This indicates improvement of fine motor control. This trend continued at a similar level between 03/14/20 and 07/25/20, although no treatments were conducted with the patient during these four months. Her speech baseline seemed to improve during the first sixteen treatments, (these were given to the patient at the frequency of 2.3 times per week). This improvement is demonstrated in [Video #3](#) (telling dream 03/10/20) and was confirmed by her polarity therapist. In Video #3, the patient demonstrated her ability to remember and relate, in articulated speech, a dream she'd had following her previous session. After session #14 (03/14/20), the patient's state of being

improved noticeably and she reported a great improvement in her swallowing capability and reduction in pain while swallowing (see [Video #4](#)). [Video #5](#) and [Video #6](#) demonstrate some improvement in pre and post session comprehension and capacity to follow instructions for performance of motor tasks.

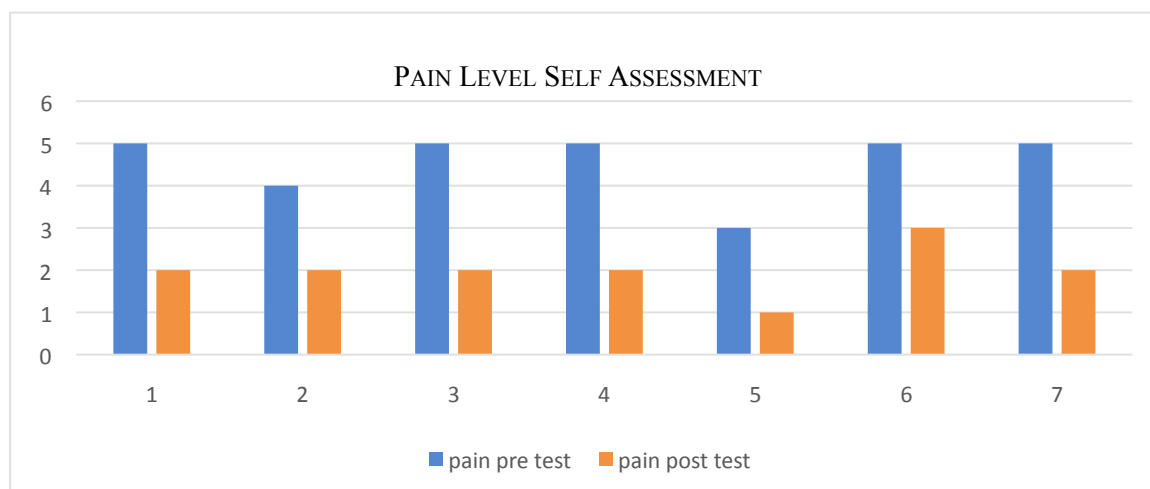


FIGURE 1.

Pre/post treatment patient's pain level self-assessment. Seven treatments (2/1/20 - 3/10/20).

0 = No Pain; 5 = High Level of Pain. X-axis = individual sessions; Y-axis = pain level.

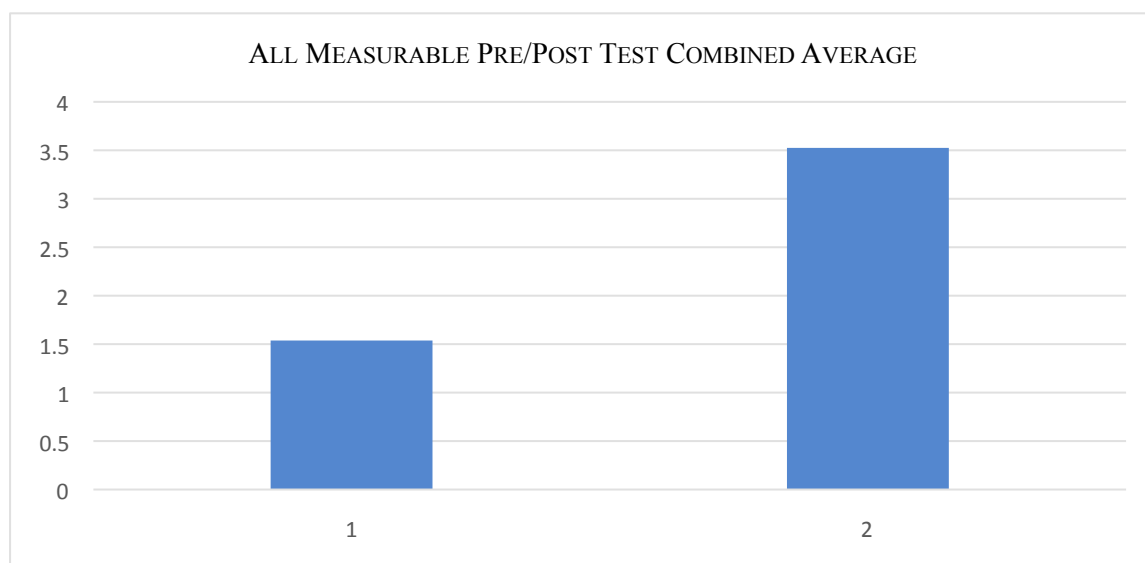


FIGURE 2.

Combined averages of all measurable pre/post treatment tests for short-term memory, gross motor control of left and right hands, and pulmonary function (spirometric vital capacity). Y-axis = combined averages of test scores. Column #1 = Pre-treatment Test Scores. Column #2 = Post-treatment Test scores.

DISCUSSION

Traumatic brain injury (TBI) is a classic example of acute brain injury and a common cause of prolonged disability. Contrary to past understanding, “the cerebral damage caused by TBI is not limited to the short temporal phase following the mechanical insult” (22). In fact, moderate/severe TBI can activate several mechanisms of neuronal damage that operate for months or years after the acute injury, potentially leading to neuronal loss and brain atrophy. Current knowledge about this process is very limited, and the actual somatic, cognitive and psychological effects in long-term survivors of TBI are for the most part poorly understood.

Studies (1-16) have shown both Jin Shin Jyutsu and naprapathy, complementary/alternative medical modalities, to be beneficial treatments, respectively and in integrated medical treatment protocols, for various health challenges such as stroke, cancer, migraines, AIDS, back and neck pain and chronic stress. Only one study in this paper’s references directly relates to TBI treatment (11). This is a randomized placebo-controlled, single-blind design, which assessed the influences of Jin Shin Jyutsu as a form of acupressure modality on cognitive flow and functional status that had been reduced by TBI. In this study, eight treatments given over a four-week period resulted in an enhancement of memory function in patients with TBI. The study presented here attempted to explore and prove the efficacy of the two alternative practices as a potentially fruitful treatment strategy for TBI.

Examination of the patient before the observational study formally began revealed clear signs of neurological degeneration. Indications of lost or diminished function included progressive loss of motor, speech and cognitive functions as well as metabolic and digestive dysfunction. The vision that led to the initiation of this study is that JSJ treatment may restore and harmonize energetic pathways through the mechanisms of redrawing and restoring cortical mapping. Naprapathy, in contrast, works by reestablishing spinal fluidity and alignment, increasing general mobility by passive and active mobilization and stimulation while sending

“reminders” to the brain that restoring lost physical and cognitive capacities are possible. It is conjectured here that brain neuroplasticity may be improved, new neural pathways created and with it, motor control, physical and cognitive functions enhanced.

The methodological limitations of this study lie in the fact that it was not possible to treat the patient with each of the modalities independently and sequentially. Her severe limitations of mobility did not allow testing her after an independent course of naprapathy treatment and an independent course of JSJ treatment and then performing combined treatments of naprapathy and JSJ simultaneously to assess their combined effects. A decision was made to not subject the patient to an intense set of tests and data collection after each treatment because it was difficult for the patient to cope with them due to her severe condition. The patient’s limited mobility made it necessary to transfer her from her wheelchair in an upright posture to the treatment table and back to her chair. It was simply too difficult for her to tolerate the transfer process twice in a session of an hour and it would have compromised the therapeutic effectiveness of the treatments.

The regularity of some level of improvements from pre to post treatment test scores, suggests that such intervention strategy could be effective in improving rehabilitation and prognosis for a patient with severe symptoms caused by TBI and suggests a potential in treating many other conditions. The treatment’s usefulness resulting from the integration of naprapathy and Jin Shin Jyutsu could not be better described, than considering what the patient herself expressed (see [Video #7](#)). She said: “Doing naprapathy without Jin Jyutsu is like eating rough uncooked potatoes without boiling them. Jin shin Jyutsu is like putting the hard potatoes in boiling water, softening them enough, so they can be consumed”; “... naprapathy then can work with the body in (a) more malleable form.” She continued, “Jin Shin Jyutsu helps to soften and relax the body, removing all places of resistance, so naprapathy can then manipulate and adjust the body with a lot more ease.”

The human body is a complex medium of life. Mental, emotional, physical and lifestyle factors interact simultaneously to determine level of functional performance. For this reason, a diversity of rehabilitative approaches can be useful,

especially when dysfunction is severe and complex such as in TBI. JSJ promotes proper energy circulation throughout the body, decreasing physical and mental symptoms, including reducing levels of pain and stress. JSJ, by harmonizing and correcting energetic flow in the body, allows the physical body, mind and spirit to follow and self-correct. Because it enhances deep relaxation, it can be utilized as a form of soft tissue prep. Naprapathy can then provide treatment of connective tissue and adjoining structures, which is believed to facilitate the recuperative and regenerative processes of the body.

Two studies (19, 20) that assessed the effectiveness of applying a different complementary/alternative medicine modality (namely, acupuncture), showed success in promoting recovery from disordered consciousness after TBI and improved neurological function. The current case study suggests that using two other “hands-on” modalities can be an effective non-pharmacological treatment for TBI.

This case study report’s results, although limited by the aforementioned challenges, offer support to the original vision and make a strong argument for conducting future rigorous studies (i.e., randomized, controlled trials with cross over treatment designs) of naprapathy and Jin Shin Jyutsu as part of a holistic treatment strategy in cases with similar complex presentations.

CONCLUSION

Treatment of TBI is complex and should continue to evolve and be further studied with controlled evidence-based scientific studies. This case study report suggests that improvement in outcome is not based on one intervention; rather it may be the additive effects of multiple interventions. As can be seen from this case study, including complementary health modalities such as naprapathy and JSJ for rehabilitation of TBI patients may offer incremental gains. What can be learned from this case study is not only the powerful therapeutic potential naprapathy and JSJ hold as separate treatments and in combination with each other, but also the possibility that the addition of multimodality utilization could have further changed

a TBI patient's outcome for the betterment. This case study conclusion is in agreement with Nelson's conclusion (23), which states that, day by day multidisciplinary rounds with trauma critical care, infectious disease, pharmacy, respiratory therapy, physical therapy, occupational therapy, social services, chaplain services, and dietary services, provided optimal medical management in the collaborative team-based approach that is called for in order to tackle the complexity of TBI. This integrative approach was far from what was available to the patient who is the subject of this case study. The health and social system that were available to her was, in general, failing her and at times adversarial to her healing.

This case study report suggests that in an amalgamated treatment strategy, the modalities of JSJ and naprapathy can be effective additions to the integration of the modalities mentioned by Nelson, in improving rehabilitation and prognosis for a patient with severe symptoms caused by TBI.

The study's observations at this point are anecdotal but suggest that studies under more controlled conditions with more patients and, if possible, matched control subjects, to see if there is a true effect of treatments by naprapathy and Jin Shin Jyutsu are merited. These could explore what effect regular multidisciplinary treatment rounds will have on improvement outcomes of severe TBIs and other conditions and diseases.

POSTLUDE (four months later)

Although the treatments included in this study were completed on August 26, 2020, I have been giving the patient weekly treatments since that date, without pre-post test. For the holidays I received a greeting card from the patient in her own handwriting (please see Appendix D). To my great joy, with this card she demonstrates a significant improvement of fine motor control. The patient reports that the only therapy she's received since August are our combined Jin Shin Jyutsu/Naprapathy treatments.

REFERENCES

1.
<https://www.ninds.nih.gov/Disorders/All-Disorders/Traumatic-Brain-Injury-Information-Page>
2.
Searls, NCMTB & Fawcett, PhD, RN, FaaN. Effect of Jin Shin Jyutsu Energy Medicine Treatments on Women Diagnosed with Breast Cancer. NCTMB Center for Health & Healing & University of Massachusetts, Boston. *Journal of Holistic Nursing*, Vol. 29, No. 4, December 2011.
3.
Bradley, Slone, BSRF & Weiss, BSRF. Jin Shin Jyutsu Energy Therapy - A Promising Adjunct Therapy in Reducing Pain, Stress and Nausea in General Cancer Population, Markey Cancer Center, U of Kentucky, Lexington, KY. 2011
4.
Lamke, Catlin & Mason-Chadd . "Not just a theory": the relationship between Jin Shin Jyutsu® self-care training for nurses and stress, physical health, emotional health, and caring efficacy. 2014 Kaiser Permanente Santa Rosa Medical Center.
5.
Plettner, ND, CAT, LMT, CCH & Mills, PhD. Jin Shin Jyutsu Acupressure: Effects on Pain and Stress-2018-UCSD Family Medicine and Public Health, San Diego CA.
6.
Skillgate, Bohman, Holm, Vingård, & Lars Alfredsson. The long-term effects of naprapathic manual therapy on back and neck pain - Results from a pragmatic randomized controlled trial. Institute of Environmental Medicine-2010- Karolinska Institutet, Box 210, SE-17177, Stockholm, Sweden. eva.skillgate@ki.se
7.
Paanalahti K, Holm LW, Nordin M, Höijer J, Lyander J, Asker & Skillgate. () Three combinations of manual therapy techniques within naprapathy in the treatment of neck and/or back pain: a randomized controlled trial- 2016- Institute of Environmental Medicine, Karolinska Institutet, Box 210, Stockholm, SE-17177, Sweden.
8.
Kristoffersen ES, Aaseth K, Grande RB, Lundqvist C, Russell MB. Medication overuse headache detoxification reduces headache disability-the Akershus study of chronic headache-2018-Europe Journal of Neurology.
9.
Espen Saxuhug Kristoffersen, Kjersti Aaseth, Ragnhild Berling Grande, Christofer Lundqvist, Michael Bjørn Russell. Self-reported efficacy of

complementary and alternative medicine: the Akershus study of chronic headache- 2013-Journal of Headache Pain

10.

Skillgate E, Vingård E, Alfredsson L. (2010) Naprapathic manual therapy or evidence-based care for back and neck pain: a randomized, controlled trial. Institute of Environmental Medicine, Karolinska Institutet, Box 210, SE-17177, Stockholm, Sweden. eva.skillgate@ki.se

11.

McFadden, K., Healy, K., Dettmann, M., Kaye, J., Ito, T., and Hernandez, T. (2011). Acupressure as a non-pharmacological intervention for traumatic brain injury. *Journal of Neurotrauma*, v. 28, pp. 21-34.

12.

McFadden, K., and Hernandez, T. - Cardiovascular benefits of acupressure (Jin Shin) following stroke.-2016-Complementary Therapies in Medicine, v. 18, pp. 42-48.

13.

Shannon. Jin Shin Jyutsu outcomes on a patient with multiple myeloma. 2002. *Alternative Therapies*, v. 8, n. 5: pp. 128, 126-127.

14.

Clancy, Macen, & Shlay. Jin Shin Jyutsu acupressure to improve quality of life in people with HIV/Aids. 1996 *Alternative and Complimentary Therapies*, v.2

15.

Plettner ND, CAT, LMT & Mills, PhD. Effects of Jin Shin Jyutsu Acupressure on Pain and Stress Poster for Jin Shin Jyutsu Pain research at the Academy of Integrative Health and Medicine in San Diego- 2018- UC San Diego Center for Integrative Medicine and UC San Diego Family Medicine & Public Health..

16.

Bradley, Slone, BSRF & Weiss, BSRF. The use of Jin Shin Jyutsu Touch Therapy as an Integrative Treatment for Pain, Stress and Nausea in Cancer Patients.-2011- Poster, Markey Cancer Center, U of Kentucky, Lexington, KY.

17.

Rowan, Muhlmeister, Garcia, Reifsnyder, Loughran, Chesney, Jain, Caltabellota & Guarneri. The Effect of /integrative Medicine Therapies in the Acute Care Setting. Poster, Atlantic Health Systems.

18.

Rowan, LCSW. Atlantic Integrative Medicine. (2010). Department of Integrative Medicine Inpatient Statistics

19.

Tan L, Zeng L, Wang N, Deng M, Chen Y, Ma T, Zhang L, Xu Z. Acupuncture to Promote Recovery of Disorder of Consciousness after Traumatic Brain Injury: A Systematic Review and Meta-Anallysis-2019- Evidence-Based Complementary and Alternative Medicine-Hindawi

20.

Li X, Chen C, Yang X, Wang J, Zhao ML, Sun H, Zhang S, Tu Y Acupuncture Improved Neurological Recovery after Traumatic Brain Injury by

Activating BDNF/TrkB Pathway- 2017- Evidence-Based Complementary and Alternative Medicine.

21.

Bagnato, Sergio, and Cristina Boccagni. "Moderate/severe traumatic brain injury as a trigger of chronic neurodegeneration in humans." 2020- *Neural Regeneration Research*, vol. 15, no. 7, 2020, p. 1247. *Gale OneFile: Health and Medicine*,

22.

Bonsack, Brooke, et al. "Fast-tracking regenerative medicine for traumatic brain injury." *Neural Regeneration Research*, vol. 15, no. 7, 2020, p. 1179. *Gale OneFile: Health and Medicine*,

23.

Clinton G. Nelson et al.-Severe Traumatic Brain Injury: A Case Report-2016-
The American Journal of case report.

24.

Baoqi Dang, Wenli Chen, Weichun He, and Gang Chen- Rehabilitation
Treatment and progress of Traumatic Brain injury Dysfunction-2017-Hidawi

APPENDIX A: Results of Pre- and Post-Treatment Tests by Self-Assessment and Measurement

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1																
2								Self-Assessment and Measurement Evaluation								
3								for use Pre/Post Naprapathic & JSJ Treatments								
4								RATING SCALE:								
5								1 = LOW 3 = MEDIUM 5 = HIGH								
6																
7	DATE:		##	##				2/1/20								
8	Session #	1														
9	Before treatment							Pre/Post Treatment Evaluation								
10	1	2	3	4	5											Change
11					5		Pain level (patient report)		2							-3
12				4			Relaxation level (patient report)							5		1
13			2				Movement capacity (volitional)			3						1
14				3			Speech			3						0
15				3			Ataxia (involuntary movements)			3						0
16			2				Motor control- Left hand dynamometer			3						1
17	1						Motor control- Right hand dynamometer		2							1
18			2				Short term memory (repeating 5 words read to the patient)			3						1
19																0
20							Fine motor skill -hand writing L hand									0
21							Fine motor skill -hand writing R hand									0
22							Spirometer									0

28	DATE:		##	##				2/5/20								
29	Session #	3														
30	Before treatment							Pre/Post Treatment Evaluation	After treatment							
31	1	2	3	4	5				1	2	3	4		5		Change
32				4			Pain level		2							-2
33	1						Relaxation level							5		4
34			2				Movement capacity (volitional)			3						1
35			2				Speech			3						1
36			2				Ataxia (involuntary movements)		2							0
37							Motor control- Left hand dynamometer									0
38							Motor control- Right hand dynamometer									0
39	1						Short term memory (repeating 5 words read to the patient)			3						2
40			2				Sense of Well-Being							5		3
41							Fine motor skill -hand writing L hand									0
42							Fine motor skill -hand writing R hand									0
43							Spirometer									0
44				3			Stress level		2							-1

APPENDIX B: Pre/Post Fine Motor Control Tests (Handwriting)

Exhibit #5

Motor control test, Session #3 02.05.2020



- Natalie - before
session

- Natalie After
session

02.12.2020

Exhibit #5

Session #5

- Before session

- After session

Pre-session

Pke.

Post-session

Right Hand

Pre-session



02.15.2020

Exhibit # 1 (8)

After session



R. Hand



L.
H

left Hand

Before -

NATURAL

After

NATURAL

03.03.2020

Pre-session

NAHUKU
11

NAHUKU
11

Post Session

03.03.2020

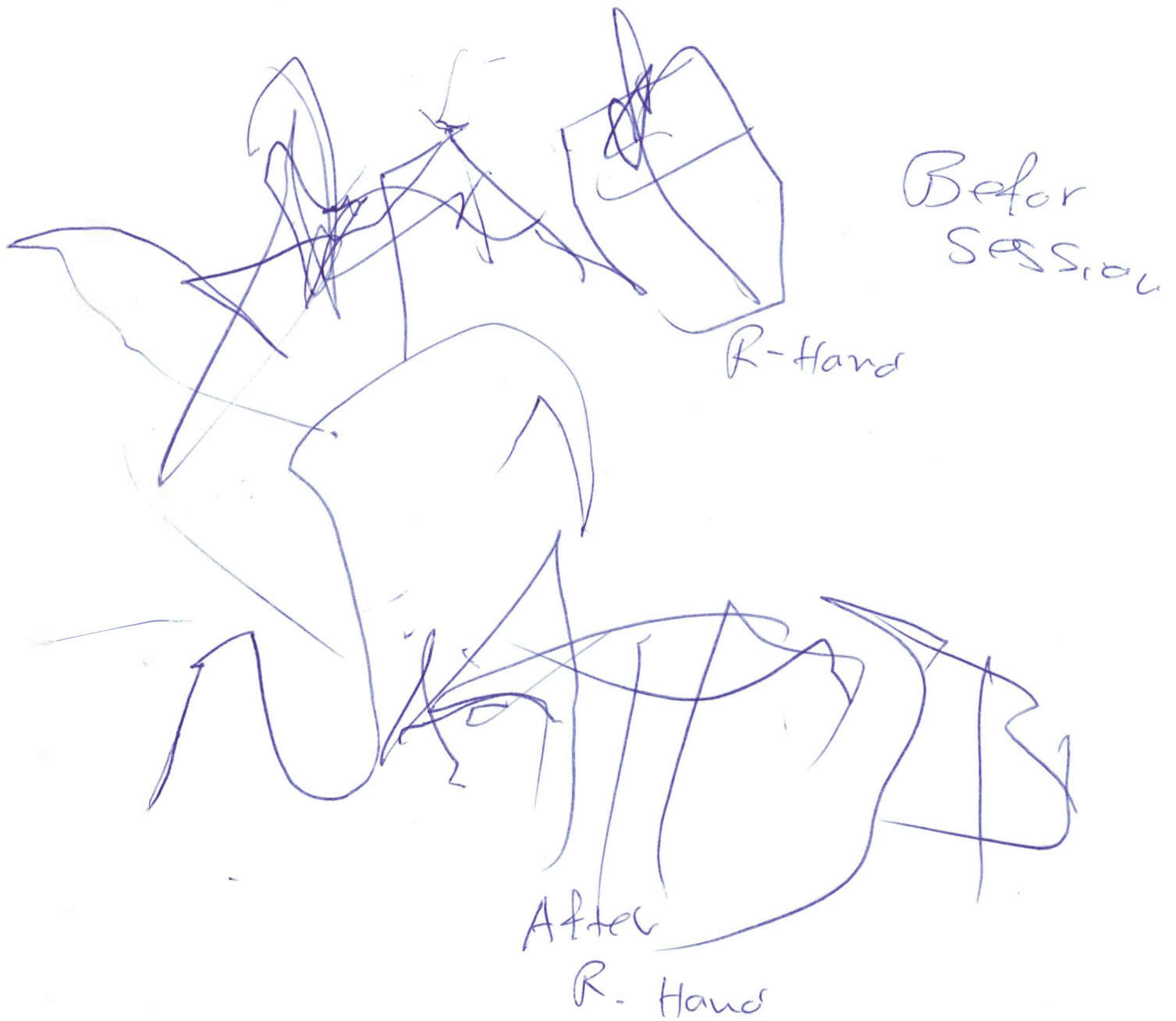
NATALIA

L 2.2 2.2

R. 1.2 2.2

I feel like a Brand New Person

03.07.2020



for loco

After 15ac

NATALIE

03.07.20

Left Hand

After session

After L-1
R 0

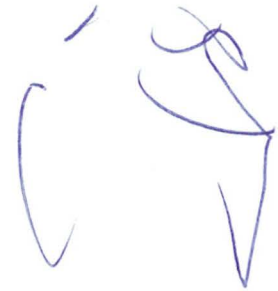
03/10/2020



R - before



Left Hand before



R - After



L - After

Suckk before 500 → 1250

L-1 → 6

R-0 → 4

03/12/2020

NATALIE

left Hand

Before

NATALIE

left hand

After

Before

L-2.6

R-0

After

3

3

Before

R-7.80

After

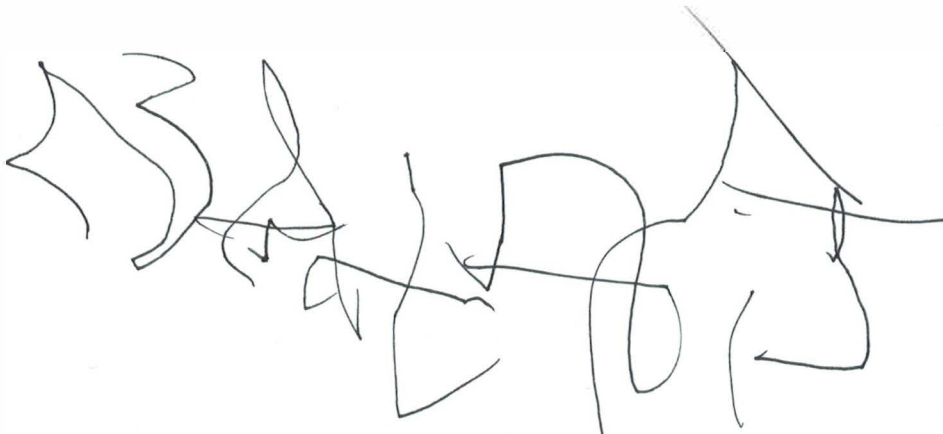
75

03/14/20

Left Hand

Pre- N R T A L L E
Post NATALIE

7.25.20

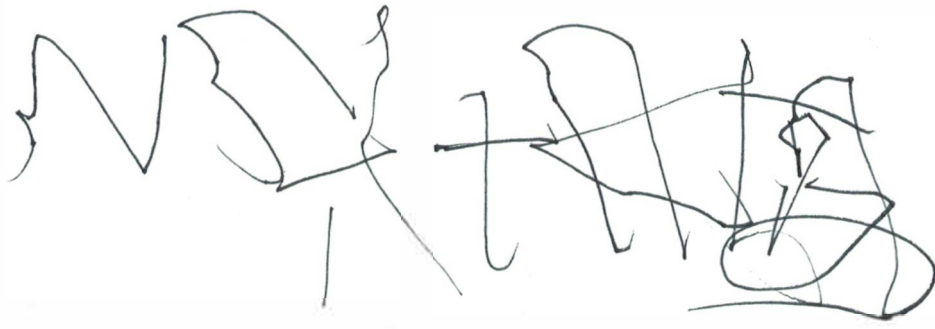


Pre-session

NATALIE

Post-session

7.27.20

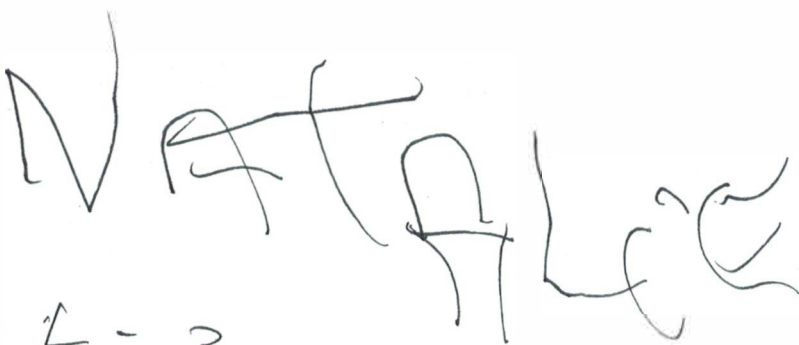


Left hand
before session



Left hand

After
session



Right hand

L - 3

R - c

08/06/2020

Post. Treatment

NATALIE

Pre Treatment

NATALIE

W

8.15.20

Pre-session

~~NATURAL~~

Post-session

NATURAL

08/22/2020

Pre-Session

NATALIE

Post-Session

NATALIE

8/26/20

Pre-
session

NATALIE

Pre-session

Post-
session

NATALIE

Post-session

11 5

APPENDIX C: Treatment Diary

SESSION #1

February 1, 2020, 11:45 am, JSJ office

The first session started with the explanation of the Pre session questionnaire. The Patient had difficulty comprehending the scale, and was confused about what the value 1, including the value up to 5 and in between represented.

In the treatment I focused on Naprapathy. I felt that the patient was not ready to be placed in prone position so did not take naprapathy findings along the spine, however the finding was taken in the supine position. Besides T11 of which the findings were deep pain (termed Anin in naprapathic terminology) the rest of the spinal vertebrae were in superficial pain that stayed the same level as I maintained pressure on the spinous processes (termed Poin in naprapathy terminology). I chose to maintain posterior-anterior (PA) pressure on transverse processes of each pained vertebra with my right hand while the left hand was placed continuously in between the eyebrows. I asked the patient to report to me when pain eased or ceased before I moved to the next vertebra. This became an exercise that required the patient's concentration and attention, which are compromised at this stage in high alert. The patient mentioned that she can felt the body-brain connection better. After a while she fell asleep as the process relaxed her.

I finished the session by holding Jin Shin Jyutsu (JSJ) safety energy Locks (SEL) number 4 and opposite 20, 21, 22 to allow fluidity in energetic flows.

The patient was much more alert when we filled the post session questionnaire. She reported modest improvement overall for the session.

SESSION # 2

February 3, 2020, 9:30 am, on hospital bed in nursing home

This session followed a night in which the patient was admitted to the ER as a result of a seizure.

She was physically and mentally exhausted but in clear mental state. Her speech was stuttered but at ease. She was talking animatedly about the overuse of anti-seizure drugs that cloud her brain. Her executive functions seem to be good, as she could narrate the chain of events and particular sensations leading to the seizure (flashes of light in her visual field and irregular heart beat) and the seizure itself, which she remembered finding herself “salivating excessively on her lap and her legs being stiff as a board”. She was reflective on the event as something that went through her to be cleared out of her system. She said: “seizure can happen and pass and there is no need to suppress it with heavy duty drugs”.

The treatment was all Jin Shin Jyutsu. I applied the fatigue flow, which is useful when the body is under heavy influence of drugs. Utilizing the fatigue flow, a treatment can bring deep relaxation. When I completed the session all the patient wanted to do is sleep and was able to relax and fall asleep. We did not do any tests or filled out a pre-post questionnaire due to the patient’s distressed state.

SESSION # 3

February 5, 2020, 3:00 pm, JSJ office

The patient arrived in an agitated state following disturbing confrontation with the staff in her nursing home. We started with two tests I designed for the pre and post questionnaire. To determine movement control, I asked her to write her name before and after session. The next test was a memory test in which I read twice five words (this time animal names) and asked her to repeat what she can remember. Before session she could remember only one animal and after session, she could remember 3 out of 5. The treatment was comprised of JSJ bladder flow, followed by naprapathy treatment of the spine while the patient laid supine. At first, I applied a posterior to anterior (PA) pressure on both sides of the transverse processes of each and every vertebrae of the lumbar and thoracic spines. I followed by placing one hand on the crown of the head while the other was gently placed under each spinous process. The patient did fall into a deep sleep during the session, so she was not

taking an active role in giving feedback this time. We did fill out the questionnaire before and after the session. (see Excel doc. session 3)

SESSION #4

February 8, 2020, 11:00 am, JSJ office

As soon as the patient arrived at the office, I noticed she was in a very low mental and physical state. She had another seizure episode the night before. She could hardly pronounce a word (video #1) and was extremely physically and mentally exhausted, I could not have her perform any test as she was hardly functional. The session in its entirety was Jin Shin Jyutsu as any manual work seemed to be contraindicated. I utilized the left and right Second Method of Correction* (4thD). Right at the end of the session the patient did not show improvement, however as I drove her to another meeting she had, her speech seemed to improve (video #2) and her overall state was better.

SESSION #5

February 12, 2020, 11:00 am, JSJ office

The patient was in a much, much better state of being compared to the previous session on February 8th. In the memory test (repeat a list of 5 fruits read twice), the patient scored 2 out of 5. In the movement test her writing was very scathed. After opening the session with a JSJ flow to open the waistline for better digestion (food, thoughts, experiences) we worked to manually relieve the pelvic in general but also relieve acute pain in the right ilium crest area she complained about. We then moved then to hip mobilizing flexing and extending right and left hips. I asked the patient to press her leg against my pressure and she was not able to. Next I worked with the spine, placing upward pressure on both sides of the transverse processes of each lumbar and thoracic vertebrae with one hand (two fingers) as I was holding the crown of the head, this meant to remind and re-awake the connection between the

body and the brain. I also performed passive mobilization of opposite hands and legs.

After the session the patient reported improvement of pain. she scored 5 out 5 in the memory test (list of 5 different fruits read twice) and she wrote her name saying; “wow I can read my handwriting”. She was very satisfied.

SESSION #6

February 13, 2020, 5:15 pm, nursing home

The sixth session was comprised of mainly JSJ, as the patient was very tired after a full day. I had noticed that in general treatments during the day are more effective than in the evening. Since the patient had pain in the groin, which may have been triggered by a hip joint over-mobilization last treatment, I utilized the kidney* flow, which runs through the groin and can help with muscular issues. The patient was able to relax and fell asleep during the session.

SESSION # 7

February 15, 2020, 11:00 am, JSJ office

I started Session 7 by testing the patient’s ability to follow instruction, such as: look to your right and look to your left. She was not able to perform the task. We started the session utilizing JSJ #14 flow with the aim to harmonize the waistline. By this protocol the digestion (food, thoughts, experiences) can be harmonized. We followed with energizing the spine, vertebra by vertebra with one hand while the other hand was placed on the occipitals (safety energy locks #4). Next I mobilized in slow motion and about half range of motion (ROM) of opposite legs and arms to mimic and activate a crawl. I palpated the patient’s different muscles and asked her to tighten up the muscle I was holding. This was done to awake connection between the brain and specific muscles. She was able to slightly activate her rectus femoris muscle on the left leg but not on the right leg, and to flex her biceps on the right arm but not on the left arm. This set of activities point to the better functioning of the right brain, which according to the patient contradict other tests findings. We

finished the session with JSJ to bring the session into calmed conclusion. The patient was in a great mood after the session. She reported some ease in swallowing. Her score in the short memory score jumped from remembering only one word 1 before session to 5 in her post session test. Her ability to write her name improved in a very significant manner.

SESSION #8

February 17, 2020, 4:15 pm, nursing home

Although the patient said she was very tired due to some disturbing incident with another patient in the nursing home that prevented her from sleep the night before she was very alert, and her speech was fairly good. She scored for the first time a 5 out of 5 in her short pre session memory test. When I asked her to turn her gaze to the right, she was not able to do so, but was able to turn her head to the left with difficulties. The session only included Jin Shin Jyutsu. The patient fell in a deep sleep, so I preferred to leave her resting rather than wake her up to do the post session test.

JSJ notes; Initially pulse was of 4th depth (specific energetic quality/vibration). I utilized Decreasing/Increasing 4th Depth Flow. The pulse turned to be 3rd Depth; Gall Bladder and Liver Flows (meridians). I utilized both flows respectively.

SESSION #9

February 29, 2020, JSJ office

The patient testified that she was “full of attitude” when she came in. Her speech was clear with very little stuttering. I utilized the Left heart flow first, which flows through the left brain and can help harmonize circulation. I followed with the 13th flow, a flow which helps to harmonize the spine and bring spirit into body. For the first time I turned the patient into prone position and work with a massage gun along the paraspinal muscles. Vibration does seem to induce beneficial changes

in outcome measures such as muscle activation and stimulation, muscle strength, muscle power, and joint flexibility and range of motion. I followed with running my thumbs along the two sides of the spine.

Next I applied a naprapathy technique, a compound 1/6 that was used to adjust the spinal column from some scoliosis. I followed with a flat 6 to rotate vertebrae in order to bring blood flow into the joints.

The patient reported that she had not felt her back that good in a very long time. As usual she felt by far more relaxed and contained. Her ability to write her name was about the same pre-post session but the quality was better pre session than previous session.

SESSION #10

March 3, 2020, JSJ office

Session 10 started by an arm wrestling between the patient and me. The patient proved to have a strong arm but most importantly was what the playful exercise showed was that her motor function improves when she is provided with counter force. The session was mostly focused on JSJ flow, which can support brain function; 13 (bustline), 15 (hipline), and Gall bladder (waistline). When I utilized the 13th flow I made sure to be touching / mobilizing every single vertebra incorporating naprapathy in this way. Before utilizing the 15th flow I performed stretches of the antero-postero fibers of the sacroiliac joint as well as sinistra (left side direction in naprapathy terms) on the PSIS and the ischium on both sides of the pelvic area to allow some mobilization from so much sitting the patient's sacrum seems to be deformed (see phot #1). After the session, the patient said: "I feel like a brand-new person". She scored better on her memory test and dynamometer test was slightly better. I introduced a spirometer test this time in which patient's results were good before and after the session.

SESSION # 11

March 7, 2020, 4:00 pm, JSJ office

Since the patient experienced a headache in the right side of the forehead I started with JSJ flow 20,21,22 (three Energy Safety Locks in the front of the head), which can help reduce energy stagnation in the head. I then tried to mobilize the right knee and met with stiffness and resistance. I decided not to overload the joint as it might cause pain. I then had the patient lie prone and used the massage vibrator along both sides of the spine and then work to mobilize the inter-vertebrae joints with naprapathy techniques flat 6 to rotate the vertebrae, and compound 1/6 to mobilize the joints laterally. At this stage the patient fell asleep. I moved to manually mobilize the hip, knees and shoulder joints with the same level of force used in regular patients in the naprapathic clinic. The joints mobilized very smoothly with no stiffness. After the session the patient's improvement on the tests was limited but she was able to express clearly how she feels JSJ and naprapathy complement each other. (see videos #5,6).

The patient's sense of humor was at its best today. When she complained about a throbbing pain in her right soleus muscle, she sarcastically made a comment: "probably circulation issue due to overweight", (she weighed 74 pounds). When I asked her after the session how relaxed she was she said: "I am relaxed as relaxed can be without being dead".

After eleven sessions the accumulated motor function progression is not quite present yet. However, the patient's speech seems to have improved substantially since we started the treatments in February. This is confirmed with another practitioner of different modality who works regularly with the patient.

In the following session the patient reported to me that after Session 11, she slept through the entire night, from 8 PM until 10 am in the morning. She had very interesting dreams.

SESSION #12

March 10, 2020, 5:00 pm, JSJ office

The patient's speech again seems to be improved. She started the session by telling me that she had a great sleep after the previous session and was telling me one of her dreams (video # 7). After doing all the pre-tests (see Chart) I first utilized the JSJ 13th flow, which helps to harmonize what is called in JSJ the universal harmonizing energy, the SOURCE. It also can help brain function and harmonizes the nerves along the spine and relaxes the patient. For the next step of the session, I turned the patient on her stomach and worked the massage vibrator along the spine. Again, this time the vibration had a very relaxing effect on the patient. She was very relaxed in prone position. I followed with running double 6s along the spine and was able to adjust few vertebrae into proper intervertebral position. Next I both performed podexco and posinco (vertebral rotation) and lateral compound 1/6 (both different naprapathy techniques) along both sides of the spine in order to create vertebral joint movement to improve blood and nervous circulation. This followed again as in the last session, with joint mobilization of hips, knees and ankles with the intention to increase blood and synovial fluid flow into the joints and to awake proprioception. The patient post-tests improved dramatically compared to pre-tests.

When I gave patient instruction to hold my hand and pull on it, she had difficulties to perform the task. When asked to point her stare to the left she was able to do it with effort and was not able to stare to the right. After the session, she was able to point her stare to both sides.

Patient also reported that in general her state of mind had changed, she is "now able to cope with the tough living situation in the nursing home a lot better".

SESSION #13

March 12, 2020, 5:30 pm, JSJ office

Session #13 was done following a psychological therapy session with her psychotherapist. The session included JSJ flow #13 with extended work along the spine and left Umbilicus flow, which flows through the brain. Next I utilized the reversing increasing 4th Depth flow, which has to do with harmonizing the muscular system. I did not perform any naprapathy manual joint mobilization. Patient was

able to write her name significantly better while in other tests there was no or slight improvement (see Chart), although her pre-session capacity was better than before. She was in a good mood after the session.

SESSION #14

March 14, 2020, 10:00 am, JSJ office

The patient came to the session after spending the night in her storage unit. She was discharged from her nursing home the day before without a place to go to. The session was a mix of JSJ flows with manual emphasis on the spine (vertebral rotation, spinal lateral adjustment) and JSJ pathways that travel through the brain (small intestine, heart, and umbilicus). There was a strong energy movement in the lumbar spine and the thoracic spine. The patient's state of being improved noticeably. She reported a great improvement in swallowing.

SESSION #15

July 25, 2020, 1:00 pm, St. Vincent hospital

Due to Covid-19 Pandemic we had to cut off our work for more than 4 months. Most of this time the patient had been in the hospital. She was not able to be discharged partly for medical reasons and partly for lack of proper living arrangements for her. She is now being fed via feeding tube, and her heart is monitored since some blockage was detected.

The session opened with the 15th flow to open the pelvic area followed by Body Functions (meridians) Kidney and Bladder flows to improve circulation and clean the body. For the naprapathic part of the treatment, to energize the spine, while the patient laid supine, I held the sacrum in one hand and with the other maintained a passive load on both right and left transverse processes of each and every vertebra from lumbar #5 to thoracic vertebra #1. At the end of the session the patient reported that her spine and pelvis region feel a lot better and mentally she felt a lot clearer. This time, on top of previous set of pre-post tests I gave her, I checked for blood pressure (BP) and oxygen saturation (OS), both were elevated somewhat in the post

check compared to the pre check (BP 90/60-96/61 OS 86-90) but the change was not significant.

In her pre-session memory tests, the patient scored 2 out of 5 while in her post-session tests she scored 5 out of 5 (see chart). Patient was able to write her name with much more clarity post-session compared to pre-session.

SESSION # 16

July 27, 2020, 3:00 pm, St. Vincent hospital

Session #16 was similarly structured to session #15. For the JSJ part I used the second and third methods of correction, both work to promote better alignment. I repeated the same technique for the naprapathy as described in session #15. The patient suggested that we add another test, in which we'll measure how long she can hold herself sitting erect pre and post session. While sitting in a wheelchair the patient's trunk needs to be strapped to the chair in order to stay erect.

SESSION #17

August 6, 2020, 1:30 pm, JSJ office

The patient had been discharged from the hospital on Tuesday July 30, 2020 and had been placed in private home in Los Lunas NM. She had to drive to the session with a 90 mile commute each way. The patient threw up before the session and it took her time to catch her breath. Her blood pressure has been higher (103/72) than her usual (low 90s/low 70s) blood pressure. She was physically exhausted than before and after the session she could not gather strength to activate the dynameter at all. Her mental state was clear she scored 5 out of 5 in her memory test before and after the treatment and her speech was fairly clear too. The session included a JSJ flow to help open her occipital region (Safety Energy Lock #4), and naprapathy work along the spine. Her ability to write her name had improved after the treatment.

SESSION #18

August 15, 2020, 10:00 am, JSJ office

The patient had to move from her caretaker house to which she moved from the hospital and where she was expected to stay for few months, she was mishandled there. She was taken in by a friend for a few nights but did not know where she was going to stay next. She was exhausted from her commute from Albuquerque and lack of sleep. She had to drop a urine sample in a lab since she was suspected to have a kidney infection, her feeding tube was plugged, obviously unused. She reported to me about not being fed properly or almost at all. The session started with JSJ left and right kidney and bladder flows, which was dictated by her pulse. Since the patient lost even more weight, for lack of flesh and deformed sacrum her coccyx has been greatly hurting her while sitting and laying supine. I provided relief for her by placing small pillows under left and right iliac bones, lifting her sacrum above the treatment table surface. Next, I then turned the patient to prone position and maintained pressure on every and each vertebrae of the lumbar and the thoracic spine and until the patient reported to me that the pain subsided in a similar way as trigger points are treated. I then worked for fifteen minutes with vibration gun on the patient sacrum, pelvis and entire spine, which brought the patient pain relief. After the session the patient went to the bathroom, she later sent me two pictures of her urine, one that she took to the lab earlier in the morning (dark like amber beer) and one she took right after the session (regular yellow color). (See exhibit Photo #2 and #3 respectively). I documented her writing after the session, which was clearer compared to the one she wrote pre session.

SESSION #19

August 22, 2020, 10:30 am, JSJ office

The patient arrived at the session exhausted again. She looked and felt as suffering from electrolyte deficiency. A weekend before she had to spend in a youth hostel since there was no place for her to be. Her sister arrived in Santa Fe to help her find arrangements. The patient testified “ my sister told me that when she first saw me in the youth hostel, her lips were blue, her fingers were blue, and her eyes were rolling to the back of my head” (Video #13).

We started the session with using massage gun for 20 minutes on the hamstring muscles, the pelvic region and the lumbar and thoracic regions of the spine. The patient reported of great tension and pain relief. I continued the session with naprapathy adjustment of the spine; very light work anteriorly since any heavier work made her breathing difficult, and vertebral lateral and rotational mobilization, finishing with myofascial work lengthways of the erector spinae muscles. I then turned the patient supine for JSJ work. Her energetic pulse was weak to non-existent. I utilized the “fatigue flow” which is helpful for such deep fatigue and also can be helpful for electrolyte deficiency. Again, as in the previous session I noticed that the patients handwriting baseline is improved. I went back and reexamined the handwriting tests since we started the study in February and identified fairly interesting baseline improvement (at pre-session) since session #13 on March 12th, 2020. (see handwriting scan tests file). This can be understood as brain-upper extremities control and function (motor skill) improvement. The patient was able to remember 4 words out of 5 in both the pre and post session memory tests. Her ability to work the dynamometer improved dramatically (0 to 6).

SESSION #20

August 25, 2020, 1:00 pm, JSJ office

The patient arrived in a state of depletion. Her speech was slow and unclear. She submitted blood work and urine for lab tests and the results were quite alarming. Her doctor told her that she is surprised that she is still alive. She gave her two options, to admit herself back to the hospital, or become hospice care recipient, in which they make sure she is as comfortable as possible. The problem is that the patient has no permanent address for now.

The patient needed her feeding pump to be kept working during the session, which dictated a supine position throughout the session. We used mostly JSJ this time. First I used Second Method of Correction, a flow that works with bladder, kidney, heart and small intestines, harmonizing the relation between the fire and water aspects of one's being, but also helps with skeletal alignment, cleaning the body and more.

Next we used the 13th flow in which every thoracic vertebra is worked with, maintaining a connection to the naprapathy work.

I extended the memory test to six words. In the pre-session test the patient needed me to read the list 3 times but remembered all six words (name of wild mammals). In the post session after one reading she remembered 5 words out of six, and all the six words after second reading.

On top of the regular tests, I tested the patient ability to follow my instruction, I asked her to look to her left and then look to her right, her post-session response was much faster.

What is interesting to me that although the patient's heart, liver and kidney was functionally low, and also being in a state of exhaustion, she is able to maintain concentration and score well on memory test and also explain to me clearly her lab results.

The patient's blood pressure was below her low normal before and after the session (84/55)

APPENDIX D: Postlude: Four months later (Improvement of fine motor control)

BORN from
YOUR OWN
BEAUTY & radiance
Which Light up
The World &
help me to remember
my own smile where
All healing is possible
OVER

Winter
Uziel Cynthia, 2020
Wishing you all the joys
of this wonderful season.
Thank you
FOR Sharing
your Beauty
SMILES WITH ME

Without you
Uzi, I'd be
in the hospital.
I am eternally
grateful for
YOU both. Thank
you for not
giving up on me.
love
natalie



APPENDIX E: Video documentation

VIDEO #1- <https://studio.youtube.com/video/hvple7qzDGw>

Pre/post treatment speech capacity.

VIDEO #2- https://www.youtube.com/watch?v=3xFi6q_CIVg

Fine motor control post treatment test.

VIDEO #3- <https://www.youtube.com/watch?v=5lOUmk3w1NM>

Remembering a dream.

VIDEO #4- <https://www.youtube.com/watch?v=wwJQ3qF3xPA>

Patient testimonial about post treatment swallowing capacity.

VIDEO #5- <https://www.youtube.com/watch?v=qkHdgRh04aQ>

Following instruction pre/post treatment (03/10/2020).

VIDEO #6- <https://www.youtube.com/watch?v=rdSIOPHg-Hg>

Following instruction pre/post treatment (08/23/2020).

VIDEO #7- <https://www.youtube.com/watch?v=WaEWksPiJhU>

Patient's description of how naprapathy and JSJ work together.