

The Local Effects of Light Touch Energy Therapies on the Healing Process: A Review of
the Literature

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Abstract

Background:

There are many forms of light touch energy healing. There is Network Chiropractic, D.N.F.T., B.E.S.T., Logan Basic, Toftness, Reiki, Polarity Therapy, Therapeutic Touch, Laying on of Hands, Acupressure, Shiatsu, and Reflexology to name a few. Some might argue that the above would not be considered a form of “energy healing,” but rather a light touch approach to the healing process. These approaches to access the healing process are used routinely in the health care industry today, as well as in the general public. More and more people, practitioners, doctors and scientists are beginning to recognize the value and benefits of the healing art of touch medicine.

Objective: To provide an understanding of the science and or theories of different forms of light touch “energy” healing. To provide evidence of the healings with these different approaches and give the reader options in their healing process.

Conclusion: Despite the popularity of touch therapies, scientific understanding of the mechanisms of effect is still not yet well developed and the research is limited in the measuring of biological outcomes.

Key Indexing Terms: Non-Force Chiropractic; Touch and Delivery of Health Care; Acupressure; Reiki; Energy Healing; Therapeutic Touch; Network Chiropractic; DNFT, BioEnergetic Synchronization technique; Polarity Therapy; Toftness

Introduction

There are many forms of light touch energy healing. There is Network Chiropractic, D.N.F.T., Logan Basic, B.E.S.T., Toftness, Reiki, Polarity Therapy, Therapeutic Touch, Laying on of Hands, Acupressure, Shiatsu, and Reflexology to name a few. These modalities are becoming more and more popular in the health care industry today, as well as in the general public. As a result there is more and more research being done. A variety of clinical trials have shown the efficacy of these methods and research has begun to show how they are effective. However, one must be prudent in their search for evidence.

To gain an understanding of these approaches one must first understand the physiology behind touch and the science of energy.

The sense of touch in the medical world is known as somatic sensations.

“Somatic, meaning of the body and sensations, meaning the ability or process of perceiving by the senses; an impression on the body or mind produced by the senses.”¹

These somatic sensations can basically be classified into three types: (1) mechanoreceptive somatic senses, which include tactile (touch, pressure, vibration and tickle) and position sense (static position and rate of movement) which are stimulated by mechanical displacement of some tissue of the body; (2) thermoreceptive senses, which detect heat and cold; and (3) pain sense which is activated by any factor that damages the tissues. Meissner’s corpuscles are nerve endings that are present in the non-hairy areas of the skin and they are sensitive to light touch and very low frequency of vibrations. Pacinean corpuscles are nerve endings which lie immediately beneath the skin and are

responsible for detecting tissue vibration of higher frequency and other rapid changes in the mechanical state of the tissues. Ruffini's end-organs are found in the deeper layers of the skin and they detect heavy touch and continuous pressure. All of these senses are involved in the detection of vibration, although they each detect different frequencies of vibration. Almost all somatic sensations enter the spinal cord through spinal nerves; ascend the spinal cord via two sensory pathways: (1) the dorsal column- medial meniscus system or (2) the anterolateral system. These pathways enter into the cortex of the brain into two areas known as somatic sensory areas I and II. These areas tell the body what to do with the information received.²

Thermal receptors are presumed to be free nerve endings but they have not been identified physiologically. Cold receptors have been defined as free nerve endings. It is believed that the cold and warmth receptors are stimulated not from direct physical effects of heat or cold on the nerve endings but from chemical stimulation of the endings as modified by temperature. These nerve endings traverse the spinal cord and terminate in the brain stem, thalamus and somatic sensory cortex.

All pain receptors are free nerve endings. They are widespread in the superficial layers of the skin as well as internal tissues. Three types of stimuli excite pain receptors, mechanical, thermal and chemical. These free nerve endings have two separate pathways to reach the central nervous system. Both pathways end in the brain stem and thalamus. Pain transmission can be inhibited by stimulation of certain sensory fibers from the peripheral tactile receptors. This could explain why rubbing the skin in certain areas is often effective in relieving pain. This mechanism and simultaneous psychogenic

excitation of the central nervous system analgesia system are probably also the basis of pain relief by acupuncture.³

Energy is many things to many people. Energy is the universal commodity on which all life depends. It is the ability to do work. It is the human form of energy that deserves an introduction here for the understanding leading to this literature review.

There are different forms of energy that our bodies utilize. "There is metabolic energy which is extracted from the foods we eat. The foods we eat provide chemical energy that allows us to be alive. Our nervous system utilizes electrical energy to communicate from one part of the body to another. Light energy is another form that our bodies utilize, for vision and cellular communication."⁴ This is vibrational energy. Another form of energy that the body utilizes is electromagnetic. Electromagnetic energy is the interactions between molecules. All matter and energy is vibrations of molecules only vibrating at different frequencies. Oscillating electric and magnetic fields such as those produced by the heart and brain of two individuals can become encoupled or entrained, through direct touch, or biomagnetic interactions or both. Molecules and their vibrations orchestrate all living processes. Regardless of technique, all healing affects molecules. The breaking of molecular bonds can be described as a series of vibratory energetic interactions. This is the level at which the various energy therapies have their effects.⁵ All known forms of healing involve energy. Chiropractic, meridian therapies and the laying on of hands and therapeutic touch all involve mechanical energy, in particular light touch mechanical energy are the subject of this literature review.

Discussion

Chiropractic

The themes that dominate chiropractic research are aimed at case studies and the efficacy of the technique performed. A search of the chiropractic literature regarding light touch revealed several techniques: Logan Basic, Toftness, Directional Non-Force Technique (D.N.F.T.), Bio Energetic Synchronization Technique (B.E.S.T.), and Network Spinal Analysis (N.S.A.) to name a few. Most of the literature ascertains the reduction of the subluxation. Dr. James Oschman eloquently relates the vertebral subluxation and its energy base as follows:

“The importance here is to recognize the importance of joint alignment in the health of the nervous system. “ The subluxation complex can be expanded to include other energetic aspects of joint alignment. Alignment of the collagen us networks has consequences of the overall energy field of the body. The main source of the electricity in the body is the electric field of the heart. The primary set of vertical conductors giving rise to the overall biomagnetic field consists of the muscles and connective tissue associated with spine and blood vessels. The magnetic fluxes through the vertebral column and surrounding tissues give rise to the overall field of the body. The best arrangement is one in which the axes of the fibers are parallel and in alignment. Departures from the parallel arrangements will tend to reduce the total magnetic flux through the system and thereby reduce the strength of the overall field. Thus every joint in the body participates in the energy flows essential to life.⁶

Much of the literature research regarding these subtle chiropractic methods are contained within the chiropractic journals and technique textbooks, thus not yet mainstreamed. Clinical observation, case studies, impairment ratings and health surveys seem to be the choice in methodology when producing an outcome. The literature search on N.S.A. technique revealed six articles. One of the articles was an experimental study

sought to evaluate the changes in digital skin temperature, surface electromyography and electrodermal activity in 20 patients under NSA care compared to five control patients⁷. The authors reported that the NSA treatment group displayed consistent sEMG readings while the control group displayed an increase in SEMG readings. The NSA group also demonstrated a decrease in electrodermal activity. The authors were led to conclude that NSA care had a “sympathetic quieting affect”. Two of the six articles were descriptive^{8,9} both were written by the developer of the technique. In the articles he describes NSA as the following: “The basis of this technique is an entrainment contact. This is a low force contact or a rapid, high velocity, low force impulse or thrust applied to the soft tissue overlaying the spine or to an extremity. The force is applied to develop the Respiratory or Somatopsychic waves, the frequency entrained spinal oscillators and or coordinated segmental rhythmic motion. This will relieve the tension on the spinal cord which then will allow innate to begin the healing process.”¹⁰

One article was a case study in which a 52 year-old man presented for NSA care for his psoriasis. His psoriasis had covered approximately 25% of his body. He had previously had oral immunosuppressant medications which reduced the coverage to 5 %. He then presented for NSA care. NSA had reduced his psoriasis to 0.5% to 1% and after 5 months of care there was no re-occurrence.¹¹ Another study of the efficacy of NSA utilized the survey method. This study focused on the development and initial validation of a health survey instrument statistically designed to employ a high level of internal reliability.¹² This study goes on to suggest the significant benefits of NSA care. Yet another study of NSA set out to take the subjective judgment and physical assessment of the practitioner out of the results by utilizing sEMG. This study recorded sEMG signals

during treatment on those who faked the wave movements and those who appeared to be spontaneous. The outcome measures were favorable in the treatment with NSA.¹³

The search found two articles on Directional Non-force Technique. Both of the articles were descriptive of the technique. One of the articles was written in a basic format describing the technique.¹⁴ The other article was written as a technical paper.¹⁵ This paper describes the history, philosophy, method of analysis, and adjusting procedure as well as suggesting clinical findings that have a high correlation with symptomatic relief, improvement in range of motion, orthopedic and neurological tests. These correlations have been documented in clinic records. The article also states that there is currently research being done, but only leaves the reader with a telephone number 310-657-2338 to inquire. The reports that the theory behind D.N.F.T. is that when pressure is applied to a tissue there is an immediate response against the invading force. D.N.F.T. adjusting is a high speed, low amplitude impulse into the musculoskeletal or disc area of subluxation.

Two articles on Logan Basic technique were found in this study. One was a description of Logan Basic technique,¹⁶ and the other was an experimental study that sought to evaluate the liability of x-ray protocols of Logan Basic technique.¹⁷ A review of 100 x-rays by three Logan Basic practitioners revealed that there was fair to moderate inter-rater agreement in determining the side of contact for Logan Basic technique.

The search found three articles on the Toftness technique. One article was a description of the technique.¹⁸ One clinical trial obtained data on 30 patients using an Agema thermography unit.¹⁹ Based on pre and post adjustment data, significant thermal changes occurred only in the group receiving Toftness treatments.

Another study sought to determine the clinical benefits of patients receiving Toftness treatments.²⁰

A search of the literature for BioEnergetic Synchronization Technique revealed two text books. Both texts were written by the techniques developer. The first book²¹ describes the fundamental basis of chiropractic physiology, philosophy, scientific view of the adjustment and the description of and theory of the B.E.S.T. technique. The book makes reference to four sources in which articles on this technique were published including Chiropractic Ergonomics, Today's Chiropractic, The American Chiropractor and The Chiropractic Professional.

The other text²² produced by the search was of utmost significance. This book provides the reader with scientific research that supports the theories that B.E.S.T. technique is based on.

A hypothesis of B.E.S.T posits that the spaces within the body in which electrons orbit and move make up the medium which harbors and transmits innate information throughout the body.²³ Dr. Morter goes on to say "if system energy resonates synchronously with space, health ensues. If system energy is asynchronous with that of space, pain and/or disease ensues. When asynchronous communication is disrupted and man responds to his own information, he feeds on himself. "We are eaten up with pain, disease and malfunction".²⁴ This book eloquently discusses energy frequencies and healing.

Meridian Therapies

For the purpose of this study, all articles and textbooks pertaining to meridian therapies were grouped together. This includes articles and textbooks on Reflexology, Shiatsu, and Acupressure. Using this method and due to the plethora of information available only sources available from the Logan College of Chiropractic Library and Maryville University Library were utilized. Five textbooks were found on meridian therapies. Four articles pertinent to this subject were found through the journal data bases as described previously. One website was utilized²⁵ as it provided excellent credentials on the topic.

One article focused on the effectiveness of acupressure in reducing pain, anxiety and heart rate among victims of minor trauma.²⁶ This article was originally published in *Anesthesia & Analgesia*, 2002, Issue 95 pp. 723-737. It was a randomized, double-blinded trial. Sixty people, ages 19 to 99 participated in the study. All subjects suffered similar small injuries. Subjects were assigned to one of three groups: true acupressure, sham acupressure or no acupressure during transit to the hospital via ambulance. In the true acupressure group 89 percent of the subjects had a significant heart-rate reduction, and a significant decrease in pain and anxiety.

Another study was an exploratory study of reflexological treatment for headaches.²⁷ This study included 220 patients with migraine and or tension headaches. The patients were treated for six months by reflexologists that were systematically drawn from a pool 5 alternative therapist association. At 3 month follow-up, 81% of the patients reported that they were helped or cured of their headache problems.

One clinical trial sought to find the effects of light fingertip touch on postural responses in subjects with diabetic neuropathy.²⁸ And another trial to consider whether reflexology can have an effect on homeostasis to establish and maintain lactation.²⁹

All five textbooks found on the topic were sources based upon the theory and practice of the different techniques.^{30,31,32,33,34}

The Chinese describe 26 basic pathways or channels of energy that traverse the body in a longitudinal fashion. These are known as meridians. The vital energy that flows through these channels is known as “Chi”. The meridians are connected to one another and energy flows between them. They are connected to vital organs and are named after the organ in which they resonate with. “The meridian and nervous systems operate in complementary fashion to translate higher energetic events into cellular patterns of physiology”.³⁵ These meridians have not been identified on a gross or microscopic level, but they have been traced through radiograph isotope injections. The meridian pathways can be accessed through needles or the fingertips.

Methods Labeled Light Touch or Hands -On Energy Healing

Again for the purpose of this study all articles and textbooks pertaining to hands on healing were grouped together.

When using the key words: energy healing, therapeutic Touch and Touch and Delivery of Health Care, enormous amounts of articles were revealed on the subject. Most of the resources for this topic were revealed in nursing journals under the key word Therapeutic Touch. Most of the research in reviewing the abstracts supported the benefits of this type of healing. Due to the overwhelming amount of literature available on this

topic, the search was narrowed down to three website articles, ten journal articles and seven textbooks which were available through the data bases at Logan College and Maryville University libraries.

The techniques of light touch energy healing that were chosen were: Reiki, Polarity Therapy, Laying-on of Hands and Therapeutic Touch. These four techniques are similar in methodology. All of them have the practitioner's hands very lightly on the body or just off the body of the patient. The healing is based on the intent of the practitioner and the ability to move the energy blockages within the patient's body as to attain vitality and healing.

Of the seven textbooks chosen, five were based upon the theory and practice,^{36,37, 38,39,40} one was a compilation of the research studies that were done,⁴¹ and one was based on the significance of human skin.⁴² The books in this section were chosen based upon reputation, content and easy readability.

Two of the six articles set out to review the quality of research⁴³ on Hands-on healing and Distance Healing⁴⁴ and this study proved to be extremely beneficial in validating this field of healing. The study selected randomized controlled trials of hands-on and distance healing done in clinical and laboratory settings and all of the trials came from peer-reviewed sources. A total of 45 clinical and 45 laboratory studies were chosen. Of the studies chosen 31 clinical trials and 28 laboratory studies reported positive outcomes. Another of the articles set out to find a biosensor as a witness of the human laying on of hands.⁴⁵ In this study a device that measures ultra-weak emissions of photons was placed at the healer's side. The results were surprising in that the analysis demonstrated photon count distributions being altered during a healing session. It also

demonstrated that during a healing a shift in cyclical components of photon emissions occurred. This signified that there is indeed a quantitative basis for hand-on healing.

One study was aimed at measuring an energy exchange between two people.⁴⁶ In this study one person was hooked up to an electrocardiogram, while the other was hooked up to an electroencephalogram. The study had the subjects hold hands directly and then with gloves, light touch contact, close proximity and then wired together. They measured cardiac and brain waves in the subjects. In all of the subjects changes in waves on the ECG and EEG were detected. This study represented one of the first attempts to directly measure an energy exchange between people. It was successful. Two of the articles were descriptive of the practice and theory.^{47,48}

Three of the articles were outcome studies on the effects and/or efficacy of the touch therapies. One article revealed that massage therapy and therapeutic touch provided comfort both psychologically and neurologically to patients receiving bone marrow transplants.⁴⁹ Another study from *The Journal of Scientific Exploration*, reported that five independent experiments on mice with adenocarcinoma, treated with laying-on of hands by trained individuals, demonstrated an overall remission rate of 87.9%, in a condition that is typically 100% fatal.⁵⁰ And finally, one article suggested that Reiki treatments effect physiological and biochemical changes in the direction of relaxation.⁵¹

Conclusion

Despite the popularity of touch therapies, scientific understanding of the mechanisms of effect is still not yet well developed and the research is limited in the measuring of biological outcomes.

There is enough research on this topic to prove that healing happens. What we do not know is exactly how it happens. From this literature review, one can see that there is enough information to suggest that science is coming to a realization that these so called “light touch energy healings” work. Studies are becoming more randomized and controlled, scientists are discovering ways to measure the human energy field and the research is becoming more mainstreamed.

However there is still much research to be done. Many claims are made via a case study or from patient records, or patient testimonials. Most of these claims are not yet substantiated by science. But due to the enormous trend and popularity of these healing methods, research has no where to go but forward. And when encased in a strong evidence-based background, it is then that these methods will be able to take proper place in the health care delivery system.

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