Multidisciplinary Therapy to Improve Posture, Treat and Prevent Pain and Injury Published June 10, 2016 at the International Occupational Ergonomics and Safety Conference (ISOES)

Marc Bonacci, D.C, P.M.M.T.P.

Arizona Pain & Posture 7320 E. Deer Valley Rd., J100 Scottsdale, Arizona 85255

Corresponding author's e-mail: marcbonacci@yahoo.com

Abstract: The field of ergonomics has made great strides in recent years by improving the workplace to reduce pain, injury and fatigue, leading to an increase in morale, health and productivity. The field of physical medicine modalities and therapeutic procedures (PMMTP) has made its own advancements in the treatment of complex and enduring pain. In order for ergonomics to be successful, an individual must have proper postural alignment of nerves, soft tissue structures and joints while performing in the workplace. The Bonacci Method of Regenerative Alignment is a multidisciplinary therapy that accomplishes this efficiently. This technique has been developed through many years of healing chronic and complicated pain patients, and research has shown that the single most important aspect of preventing pain is improving posture. This article explores the symbiotic relationship of a multidisciplinary treatment approach with the principles and practices of a sound ergonomics program. The Bonacci Method utilizes assessment and treatment techniques found in a variety of overlapping disciplines, which maximizes the benefits of ergonomics. The result is increased capacity to function in the workplace, decreased on-the-job injuries, and prevention of pain.

1. Introduction

Chronic pain is America's biggest health problem, and the number one reason people go to the doctor. According to USA Today, more than 100 million — more than 40% — of adult Americans suffer from it. It costs the nation more than \$600 billion per year, which is more than diabetes, cancer and heart disease combined. (Foreman, 2014) Chronic pain is the result of negative environmental factors such as improper ergonomics, which causes misaligned posture, degeneration and cell dysfunction. Proper ergonomics and proper posture have a symbiotic relationship — preventing pain and establishing optimal efficiency at work.

When the body is out of alignment, the body feels weak. Consider the disabling positions imposed in martial arts that aim to weaken an opponent by placing the body in a misaligned position. This misalignment drains the body of energy and causes fatigue. When the body regains proper alignment — proper posture — strength returns. With increased strength comes increased productivity. The Bonacci Method focuses on improving posture and gaining strength by utilizing a complex sequence of maneuvers to realign the core structures of the entire body: the nerves, connective tissue, joints and muscles. The goal is to prevent pain, but if pain already exists, the goal is to release the pain and prevent its return. Living with pain means living with a constant distraction — the enemy of productivity. Pain leads to early fatigue, as does improper ergonomics.

We must first recognize that the body is not a collection of separate encapsulated elements, but a sophisticated entwinement of dynamic elements working together. Just as a properly functioning orchestra is made up not of instruments played in isolation, but each element playing together to make a harmonious sound. A multidisciplinary approach to preventing pain and injury embodies this idea.

As humans age, the body slowly deteriorates. The muscles atrophy, placing unusual stress on joints and nerves, and developing scar tissue and inflammation throughout the body's fascia. This process inevitably causes pain, loss of strength, poor posture, decreased energy, and lower productivity at the workplace. Proper ergonomics will help, but if the body is in a debilitated state, it will remain a challenge to maintain or increase productivity. The Bonacci Method improves posture to allow for maximum efficiency of movement. Proper soft tissue, joint and nerve alignment results in less strain on the body, creating less irritation and inflammation. Specific exercise integrated with therapy can then help to maintain proper posture and strength. The resulting preservation of energy allows for greater endurance, higher morale and a healthier mood, all of which feed a positive work experience and hence, productivity.

1.1 History and Evolution of The Bonacci Method

For many chiropractic physicians, the field of chiropractic has evolved since the days of the five-minute consultation and adjustment. The foundation remains well grounded in empirical research and a long tradition of anecdotal evidence. But

as in all disciplines of healthcare, changes are made in baby steps as practitioners tackle clinical challenges and seek validation in scientific research. The practitioners who participate in this evolution recognize their craft is part science and part art. This paper is a snapshot of the result of that pairing; a pioneered therapy that embraces many elements.

The Bonacci Method of Regenerative Alignment was developed over 15 years, the result of a steady stream of severe chronic pain patients. Most of them had been in pain for a long time and were told they would be on medication for the rest of their lives. Some were failed surgeries. Some had been in car accidents. Some had simply deteriorated from lack of exercise and poor diet. A chiropractic adjustment was not enough on its own to help these people. The adjustment restored alignment to the joint, but strained muscles and tight fascia pulled the body back out of alignment quickly. Drawing from physical medicine modalities and therapeutic procedures (PMMTP) to align the fascia and muscles, the beginning of the multidisciplinary approach began to take shape. These manual therapy techniques were combined with adjustments and patients began to respond well.

The technique for diagnosing the true origin of the pain is a focus and critical key to solving each complaint. Often the true source of pain evades traditional assessment techniques. The Bonacci Method of diagnosing helps identify well-hidden elements contributing to the pain, often with multiple sources. Assessing the pain is fluid, often overlapping into the therapy itself, from which the practitioner learns more as the rehabilitation progresses.

Every body is different, and every injury different, and therefore requires thinking outside the box to creatively find a sequence of therapeutic modalities that works. Over time the method has been honed to suit multiple situations, no matter the complaint. The Bonacci Method of Regenerative Alignment is gentle, flexible, fluid, dynamic and holistic. This means the patient takes on some responsibility in their own health.

One aspect of healthcare that often goes overlooked, and even directly opposed, is the primary agency of the patient in their own restoration to health. Part of the Bonacci Method is custom-tailored exercises. Exercises are based on observations that patients suffering from back, neck, arm or leg pain are not able to perform certain motions and activities. As therapy progresses, patients are gradually adjusted to perform a specific series of exercises developed in the Bonacci Method. The last components are diet and spiritual well being. Maintaining a healthy lifestyle is an integral part of wellness. When the whole body is functioning properly, ergonomics will additionally help prevent further pain or injury.

2. Technique: The Bonacci Method of Regenerative Alignment

The Bonacci Method relies on the effectiveness of a multidisciplinary approach for the assessment, treatment and co-management of complex pain and injury conditions, as well as prevention. The method achieves success in conditions that were not responsive to prior medical, chiropractic and physical therapy examination and treatment. These tools allow the practitioner to look past often misleading results found on traditional examination and diagnostic reports.

2.1 Assessment and Diagnosis

In addition to taking a traditional medical history and performing an initial physical examination, the Bonacci Method incorporates its own standards to determine an initial working diagnosis. This unique assessment begins with a sequence of in-depth palpation of nerve plexuses, peripheral nerve and soft tissue structures to determine the origin of the pain. Starting with light palpation in an effort not to irritate the pain cycle, then slowly increasing pressure not to exceed patient tolerance. This method helps to determine the level of involvement of both the soft tissue and nerve structures. Once the level of soft tissue and nerve involvement is determined, palpation proceeds to the bones and joints to help determine their involvement in the patient condition. Regardless of the area of pain, this assessment is performed at both the cervical-thoracic junction and lumbo-sacroiliac junction. Nerves and fascia extend throughout the entire body, connecting parts that are directly and indirectly related to the area of complaint. Therefore, this extensive palpation gives further insight to the patients causation of and relevance to their pain. If an extremity is involved in the complaint, that extremity is assessed in the same format.

When assessing joint aberrant motion the Bonacci Method utilizes both static palpation and motion palpation. Static palpation helps determine how the affected joint is aligned when the body is at rest, as well as determine if the ligament attachment sight is inflamed and tender. Motion palpation is also performed. This can be a complicated assessment because vertebrae can be misaligned in complex ways involving any one or a combination of positions. The Bonacci Method simplifies its efforts to show aberrant motion in two primary directions, flexion and extension, which also reveals rotation elements that may be involved.

Next, basic active and passive range of motion is assessed to determine the level of function and further assess the involvement of the nerves, soft tissue structures and joints. If there is limitation or increased pain, palpation is then performed during motion to further determine and confirm the origin of the pain.

Finally, decompression and repositioning holds are performed to determine if the patient is able to find positional relief. Unlike many orthopedic tests that are designed to reproduce pain to determine involvement, these tests determine

involvement by providing relief. This is important because when assessing patients that have been in pain for a long time or are suffering from acute pain, reproducing pain during the examination itself can exacerbate the patient's condition.

2.2 Nerve and Soft Tissue Alignment

The Bonacci Method utilizes exam findings to initiate treatment. Starting with alignment of the nerves and soft tissue first, then moving to joint alignment. The rationale is that if the joint is attempted to be aligned first, but the control mechanism of the nerves and support structure of the soft tissue are not functional and released, the joint alignment does not hold well. This has been clinically proven as an effective approach to alignment and pain relief.

Often, especially with chronic conditions, the nerve or soft tissue is not able to be easily released and requires a series of moves. Jockeying back and forth between attempts at releasing nerves, myofascial elements and compartment decompression is required. At first the nerve may not release with manual work, but after releasing the soft tissue, decompressing the area, then going back to the nerve, it will eventually release.

It is a vital part of the Bonacci Method to achieve nerve release to have a lasting affect. The brain is our on-board control mechanism. The nerves are the most condensed energy in the body and an extension of the brain. If they are not released, the body is less likely to accept change — repositioning and alignment. Once released, the body is better able to compute the changes in myofascial restructuring and joint position sense, otherwise known as proprioception or mechanoreception. Proprioception is how the joint knows where it is in space.

2.3 Joint Alignment

Proper joint alignment decreases pressure and increases proprioceptive input. The Bonacci Method offers three options to be effective as needed: a manual high-velocity adjustment, a gentle approach with an adjustment instrument called arthrostim, or a long-lever adjustment. High-velocity is a chiropractic technique and occurs with the body in passive motion. Long-lever is traditionally an osteopathic manipulation and occurs during motion. The Bonacci Method offers a slightly modified version of the long-lever adjustment called motion mobilization. All types of adjustments improve alignment and motion. When a patient is in a lot of pain, does not want an adjustment, has osteoporosis, or an adjustment is contraindicated due to surgery with hardware, motion mobilization is a good option.

If the patient is unable to handle repositioning due to pain, additional direction is offered. Treatment options for pain relief without alignment are passive modalities, ultrasound, ice, heat or electrical stimulation. At this stage the patient is also offered a possible referral for diagnostic imaging, medical evaluation, possible short-term oral medication or holistic options. Often a few days of rest can be instrumental before attempting alignment again.

3. Exercise, Diet and Ancillary Factors

According to a 2008 survey of 14,000 people in Consumer Reports, the top-rated measure to help relieve back pain was exercise. Exercise is a critical part of the Bonacci Method, strengthening the body while in correct alignment and posture, in order to create muscle memory for longevity. Diet and other at-home strategies round out the equation for prevention of pain, allowing the body to thrive in the work environment.

3.1 Exercise

Patients perform postural exercises and stretches throughout all stages of healing, beginning in the office during therapy until the patient is proficient enough to continue at home. By gently inducing proper motion to the joints and muscles with manual therapy and postural exercises, the parts are put back in place and the healing can begin. Five basic exercises are incorporated into treatment and intended to repeat very simple motions that patients in severe pain and poor posture cannot perform. These exercises tell a lot about posture and function, and are often used in the assessment. Finally, these exercises give patients awareness through motion and help predict when to come into the office for treatment; if they cannot perform one or more exercises they need to make an appointment. The therapist works on that area and restores proper function and mobility.

Postural exercises and stretches help decrease abnormal strain patterns that develop in both the musculoskeletal and nervous system. These patterns are part of who we are; our accomplishments, emotions, soul, pain, as well as the result of injury, trauma, age and work. As a strain pattern becomes established in the body, the nervous system grows used to that stimulus, enabling a downward cycle of poor posture. As the body slowly and unnoticeably contorts, the strain pattern strengthens. Excessive healing causes scar tissue to be laid down, woven through the fascia. Postural exercises and stretches effectively break up this negative input, allowing the parts — joints, muscles, ligaments, nerves — to move properly and stay in place, resulting in less wear and tear and a better functioning nervous system. The existing negative pattern of neuroplasticity — the growing of nerve endings — transforms into a positive pattern. The nervous system is retrained.

Once proper biomechanics has been restored with the Bonacci Method and pain is decreased, the patient can move on to more traditional exercises and stretches for posture, strength and endurance. Exercises and stretches are determined based on patient condition and function. The goals of exercise range from decreasing pain, to strengthening an area, to increasing range of motion. In general, most gentle yoga and mat Pilates can be performed with minimal risk (basic sun salutation and trunk stabilization exercises). Patients are to perform all exercise within the body's limitations and pain-free zone, and in proper posture. If surgical hardware is present in the neck or back, extension (bending backward) exercises are avoided. If increased pain is indicated with exercise, modified exercises will be prescribed. Every body has a different structural weakness, and every regimen is custom-tailored.

Here is a simple routine: While lying prone, stretch the anterior upper torso and neck upward to flex the erector spinae muscles. Exercise and stretch all lower torso core muscles — anterior, lateral and posterior. Stretch hamstrings and strengthen quadriceps. This strategy of exercise allows the human body to strengthen core muscles and large muscle groups, move more easily into proper posture without undo strain, friction or pain, saves energy and improves endurance.

3.2 Healthy Traditional Diet

The Bonacci Method embraces a traditional diet rich in organic, whole foods while avoiding junk food or chemical food. Patients are to minimize sugar, carbohydrates and caffeine, which helps decrease inflammation in the body and allows for increased cellular healing. Nutrition should be supplemented with high-quality cod liver oil, Vitamin C, digestive enzymes and probiotics daily. For a comprehensive, scientific look at what happens when food is digested and suggestions for a wholesome diet, the Bonacci Method acknowledges the book, "Nourishing Traditions" by Sally Fallon, based on the research of Dr. Weston Price. (Fallon, 2001)

A healthful diet speeds healing and prevents degeneration. Price studied healthy, non-industrialized peoples in order to understand the importance of eating nutrient-dense whole foods. The diets of these healthy communities contained no refined or denatured foods such as: refined sugar or corn syrup, white flour, canned foods, pasteurized, homogenized, skim or low-fat milk, refined or hydrogenated vegetable oils, synthetic vitamins, toxic additives and colorings. All traditional cultures consumed some sort of animal food such as: wild-caught fish and seafood, land and water fowl, land and sea mammals, eggs, milk and milk products, reptiles, insects. (Boyd, 2000) Grass-fed and free-range organic meat is optimal.

The whole animal was consumed — muscle meat, organs, bones and fat. The diets of non-industrialized peoples contained four times the minerals and ten times the vitamins found in animal fat as the average American diet. All traditional cultures cooked some of their food, but all consumed a portion of their animal food raw. Raw and fermented food contains enzymes and probiotics necessary for proper absorption of nutrients. A healthy diet promotes healing and is therefore an integral part of the Bonacci Method of Regenerative Alignment.

3.3 Ancillary Factors

Ben Franklin famously and wisely said, "An ounce of prevention is worth a pound of cure." Supportive care is not to be underestimated in its role in successful therapy and ergonomics. At home, the patient is instructed to follow the guidelines of the Bonacci Method for ice and heat, posture and joint support, proper gait and activity, and balancing energy. If the guidelines are followed closely, most patients will only need a maintenance visit to the office once every two to five weeks. Just an ounce of prevention.

Ice and heat: If injury has been within the last 48 hours — ice 20 minutes on, 50 minutes off, throughout the day. If it is after 48 hours from the time of injury — use ice or heat. Apply for no more than 20 minutes, and/or alternate ice and heat — 20 minutes ice, 20 minutes heat. Rest the area for at least one hour before reapplying.

Posture and joint support: Use of a Denner roll or a small rolled towel under the low back or neck while lying supine helps to restore cervical and lumbar lordosis. When sleeping, sitting or traveling, properly support the curves of the spine. On the couch or in the car, a small throw pillow placed just above the low back is recommended to support the mid-back and torso from collapsing onto the lower spine. With the torso upright, the head and neck shift up and back, decreasing strain on the entire spine. When lying in bed place a flat towel under the pelvis and low back, keeping the spinal joints from collapsing into the bed and opening up, which causes strain to the ligaments that support the joints. Place a pillow underneath the knees when lying supine, as well as between the knees when lying laterally. Both pillow placements put slack into the spine, relaxing it. Kinesio-Tape is also helpful between visits in order to maintain decreased myofascial strain, superficial nerve tension and provide joint support.

Proper gait and activity: Re-set the spine and joints with basic stretching throughout the day. This is recommended prior to house cleaning, washing dishes, working on a hobby, or simply walking. After rising from a seated position, or standing at the counter preparing food, stretch briefly for 10 to 20 seconds before moving again. This will help realign joints, relax strain in muscles, decrease wear and tear, and avoid irritation with movement. If muscles or joints are being flexed while out of alignment, it causes more damage than good.

Balance energy: Throughout the day and throughout life we have a limited supply of energy in the tank. Use it wisely. Unnecessary negative emotions, thoughts or actions will recklessly drain the tank. Inadequate sleep and a poor diet cause the body to run low on energy, which results in poor cellular turnover, poor healing and increased pain.

4. Co-Management with Allopathic and Holistic Practitioners

Depending on the patient's severity of pain and dysfunction, as well their responsibilities at home and work, a series of options are offered for co-management. The Bonacci Method recommends starting with the least invasive, moving to more invasive treatments as necessary. It is important the patient understands the intention of each treatment.

Designed to decrease inflammation or block pain messages to the brain, allopathic treatment is largely the treatment of symptoms. In some cases, a patient will benefit from a short-term prescription pain medication, which enables the patient to exercise and gain strength in the weak, injured area. Once strength is achieved and healing begins, the medication is no longer necessary, and the patient can begin the Bonacci Method. In more extreme cases, interventional pain management, epidurals, nerve blocks, facet blocks, and radial nerve ablation are used. As a last resort surgery becomes an option.

Holistic treatment is designed to promote innate intelligence in the body and cellular regeneration. Both prolotherapy and platelet-rich plasma injections are types of regenerative injection therapy, designed to increase cell growth and structural integrity to areas of repetitive stress, injury or weakness.

The prefix "prolo" comes from "proliferation of cells." Prolotherapy is often used for joints that have not healed well and remain loose — commonly known as ligament laxity. This condition causes joints to fall out of place easily, creating pressure in articulating joint surfaces and pain in the surrounding muscles and soft tissue. Performed by both medical and naturopathic doctors using a series of injections into the area, increased cell growth is triggered by the irritation of the needle itself combined with injection of a solution — usually lidocaine, dextrose and zinc. Because the body heals by means of inflammation, prolotherapy tricks the body into thinking it has been injured. This results in a calculated exacerbated healing response as cells regenerate in the area during the next several weeks. The result is increased structural integrity of the area.

In platelet-rich plasma (PRP), blood is taken from the patient and spun in a centrifuge which separates the platelet-enriched plasma. The plasma, which contains several different growth factors and cytokines that stimulate healing of bone and soft tissue, is then injected back into the area of complaint. This is an effective procedure for damaged ligaments, tendons, meniscus or labrum, as well as osteoarthritis. (Tallman, 2016) Both of these injection therapies coupled with the Bonacci Method allow for longer-lasting alignment, improved function and pain relief.

5. Case Studies

5.1 Case Study #1: "Martin"

History: Martin is a 47-year-old who presented on April 4, 2016 with 10/10 low back pain and tingling in both legs. He was doubled over, only able to support his upper body with use of his arms. He also reported occasional numbness in his legs, but the low back pain and weakness was his greatest concern. Martin is a top executive for a major corporation and was traveling for business. He had been this way for four days and had been to the hospital a few days prior.

Martin is a single father of two. He has a history as a professional tennis player and in the recent past played on a flag football team. Martin is a chronic low-back pain patient. His usual pain level is 4-5/10. He takes pain medication regularly: Oxycodone (10 mg) three times a day, Androgel and Celebrex. Martin's pain management medical doctor referred him to Arizona Pain and Posture for assessment and treatment.

A lumbar spine radiology report on March 8, 2012 revealed superior and inferior end-plate compression deformities, mostly L1, L2, L3, and to a lesser extent L4. Bone mineralization was normal. An MRI report of the lumbar spine without contrast was performed on March 24, 2012. Relative findings include neural foramen on the left is mildly narrow due to a bulging disc.

Examination: Patient walked with severe forward antalgia supporting upper body on thighs. Active range of motion in seated position revealed motion from 20 degrees flexion to 85 degrees flexion. Coming up from 85 degrees he used his hands to crawl up his thighs. He was unable to sit up past 20 degrees flexion even with the use of his hands. He could not stay at 20 degrees and had to flex back down to 30 degrees to get relief of severe pain. Soft tissue palpation revealed severe tight and tender muscles of bilateral lower back, upper buttocks and antero-lateral hip flexor muscle groups. Due to severe pain and loss of motion, we were unable to perform any other orthopedic examinations. Joint palpation revealed moderate tenderness, aberrant motion flexion, and fixation of L5 and S1.

Treatment was initiated with the patient lying supine with knees bent. Manual release was applied to right side, then left side anterior pelvic nerve group and myofascial structures. Patient was then placed in side-lying, right side up first, then left side, to perform continued release of posterior-lateral myofascial structures and nerve root decompression. Finally he was asked to sit up. Immediately he was able to reach a neutral seated position. At this point, motion mobilization to the lumbar

and sacral aberrant motion segments were performed. The patient was asked to walk. He was pleasantly surprised to find himself able to stand up without use of his arms. After walking down the hall and returning, he reported 6/10 pain.

The patient was treated again with the same treatment two days later. On that day he initially reported maintaining the same level of 6/10 pain. He presented with 50% less spasm and tenderness in hips and low back. He was able to sit and stand up in a neutral position without use of his arms. After performing the same treatment as two days earlier he was able to move into 5 degree extension and reported 4/10 pain.

Follow up: Patient has been unable to get back in for treatment due to his extremely busy schedule and business travel. In his most recent communication on April 25 he stated that he has had no more severe attacks and has been maintaining his minimal pain levels of 4-5/10.

Conclusion: Despite significant history of medical findings and presentation of severe acute pain of a chronic condition, the Bonacci Method helped improve his posture, allowing him to experience immediate pain relief and improved range of motion and strength. He was able to return to work and family responsibilities without return of severe pains for three weeks. He has had lasting results with only two sessions. He is expected to return for follow-up treatment and would likely benefit from co-management with prolotherapy.

5.2 Case Study #2: "Rocky"

History: Rocky is a 54-year-old golf instructor. On April 13, 2014, while working on increasing his golf swing velocity, he suffered an injury to his right low back. Since then he has experienced constant 2/10 pain in the right sacroiliac joint and occasional numbness in his right quadricep. He reported that twisting or sitting makes his pain worse and lying down makes it better. He reported that when walking or standing his back hurts and feels stuck.

Rocky presented with an MRI report of the lumbar spine taken on January 16, 2015. The impression of the lumbar spine report revealed overall mild multilevel degenerative changes except for L4, L5 which were more severe. Also noted was grade-one anterolisthesis at L4, L5 with possible bilateral pars defect, resulting in moderate to severe narrowing of bilateral foramina with abutment and possible compression of the bilateral L4 nerve root.

The patient reported having multiple chiropractic visits and multiple physical therapy visits during the previous two-year period. He stated the treatments helped, however, he did not find lasting results. He had been unable to return to the gym to strengthen or stretch the area due to pain. He also reported not returning to golf due to pain. He was about to schedule an appointment for prolotherapy, but thought he would make one last attempt at an alignment therapy first.

Relevant examination findings include 20% limited lumbar range of motion on flexion and extension, with extension motion reproducing pain into the right quadricep.

Treatment: The patient was treated with the Bonacci Method, releasing nerve structures and myofascial structures in the surrounding pelvic and hip area, as well as joint mobilization work to the lumbar and sacral spine. After alignment of the nerves, soft tissue and joint in the immediate and surrounding area, the patient was asked to take a walk and return to a seated position. Immediately on his walk back to the table, the patient reported that his lower back pain was gone for the first time in two years. His range of motion was full and without pain.

Follow up: The patient was treated for six consecutive visits from March 21, 2016 to April 11, 2016 with the same treatment protocol over a three-week period, two visits per week, to ensure alignment. His pain in the low back did not return.

Conclusion: Alignment of nerves, soft tissue and joint allowed for improved posture. The improved posture and aligned body parts resulted in 100% pain relief and restoration of motion. He has maintain these results for two weeks without continued treatment.

In his last communication he reports returning to the gym, returning to work, and increasing his home exercises for strength and flexibility. His recommended follow-up treatment is one time per 4 to 6 weeks for alignment to prevent return of the problem.

6. Conclusion

In order to put ergonomic principles into practice, a worker must have an awareness of posture and movement. Natural posture must be maintained during work, and postural positioning should be varied. Ergonomics helps create a good atmosphere for our health on a cellular level.

Bruce Lipton (2012 a,b), quantum physicist and cell biologist, explains that the human body is comprised of a harmonious community of 50 trillion cells, each of which functions primarily in reaction to our environment — the energy field that surrounds us. Electromagnetic fields control the movement and signals of proteins inside us, which control the various functions of our bodies. Disease is caused when the nervous system sends inappropriate signals, generated through trauma, toxins or thought. The energy flows from the environment to the brain, then to the spinal cord and finally to the peripheral organs. Improper ergonomics creates bad energy flow. The energy in the body reflects the surrounding energy,

because the atoms in the body are not only giving off energy, they are absorbing it. We cannot separate ourselves from our environment; we are entangled within its energy. Albert Einstein said, "The field is the sole governing agency of the particle."

The Bonacci Method of Regenerative Alignment offers a multidisciplinary, holistic approach to prevention, assessment and treatment of pain, which combined with proper ergonomics in the workplace, establishes muscle memory of natural alignment, resulting in a high-energy atmosphere in the body conducive to productivity.

7. References

Boyd, Tim. (2000, Jan.). Principles of Healthy Diets. Retrieved from http://www.westonaprice.org

Fallon, S., (2001). Nourishing Traditions. (2nd ed.). New Trends Publishing.

Foreman, Judy. (2014, Feb.). Chronic Pain: Millions Suffer, missing non-drug options. Retrieved from http://www.usatoday.com

Lipton, Bruce. (2012, Oct.). Chiropractic Philosophy and the New Science: An Emerging Unity. Retrieved from http://www.brucelipton.com

Lipton, Bruce. (2012, June.). The Wisdom of Your Cells. Retrieved from http://www.brucelipton.com

Tallman, David. (2016). Therapies. Retrieved from http://www.arizonaprolotherapy.com