Is Color and Light Therapy an Effective Complementary Therapy for Oncology Patients? An Analysis of One Practitioner's Anecdotal Experiences

Janet Lynn Roseman-Halsband, PhD, MS, R-DMT

Abstract

Background: Color and light therapy has its roots in ancient medicine, although historical and medical implications have not been fully documented. Knowledge about the therapeutic value of color and light therapy has informed both ancient and contemporary medicine. This paper will discuss the author's experiences working with oncology patients using color and light therapy called colorpuncture and includes a preliminary analysis of its efficacy based on participants' reports and the practitioner's notes. Treatment sessions were offered at the now defunct Wellness Community in Boca Raton, Florida, a cancer support organization. The author studied colorpuncture founded by Peter Mandel, ND, a scientist and naturopathic healer who is the Director of the Mandel Clinic in Bruchsal, Germany.

Materials and Methods: Educational lectures on the history of light therapy and application of colored light were provided for all interested participants who attended several educational presentations. All participants were invited to receive sessions without charge and were shown the acu-light therapy device used in treatments. All participants signed up for treatment sessions without committing to any specific treatment frequency. Sessions were held at the Wellness Community during 2004–2005. No Institutional Review Board application was filed, and permission was granted by the Clinical Director. All participants were given contact information to report adverse reactions or to share information with their physicians. Participants filled out surveys and completed reports that were sent to the practitioner. Each session lasted 45–60 minutes, and all participants received appropriate color and light therapy applications that addressed their individual health concerns. Participants were informed that all of their responses would be recorded and would be anonymous for any future publication.

Results/Conclusion: Participants were treated with the application of colored light called colorpuncture for common

oncology problems, including gastrointestinal problems, sleeplessness, anemia, balance difficulties, nausea, loss of appetite, depression, and so on. This noninvasive integrative medicine therapy was often described by patients as both “painless” and “relaxing.” Initial analysis based on participants' reports indicated that color and light has proven to be effective (anecdotally) in the reduction of common problems that people with cancer experience, including side effects from radiation and chemotherapy treatments: nausea, vomiting, anemia, pain (in general), and port pain (in particular). The author intends to conduct future research through a controlled trial to gather data on the efficacy of this integrative therapy utilizing her own technique called spectra-immunology™, which included the application of colored light therapies with energetic therapies.

Keywords: color therapy, light therapy, oncology, pain, pain reduction, integrative therapy, nausea, acupuncture, colorpuncture

History of Light Therapy

Color and light therapy has its roots in ancient medicine, although its historical and medical implications have not been fully documented. The physician and disciple of Aristotle, Avicenna (980–1037), wrote in the Canon of Medicine about his use of color therapy as a diagnostic tool with patients. Asclepiad temples in ancient Greece were one of the earliest examples of utilizing therapeutic elements of sunshine and were very popular for pilgrims seeking cures for serious health conditions. In fact, those who were too ill to make the long arduous journey to these sites would elect a proxy who would sleep in these healing temples on their behalf. Not only do geographical remnants from these temples remain, but the recordings of healing treatments also have been found that suggest the use of opiates as well as “psychic” surgeries. These

sacred sanctuaries were named after the god of medicine, Asclepius, whose symbol of a snake (or two snakes) entwined around a cane continue to appear on physicians' white coats today. Pilgrims would receive color and light therapy as they rested in private rooms while colored drapes of various hues were hung on the windows in the temples to accommodate the light from the sun. The belief at that time was that the god Asclepius would appear to those pilgrims who slept in the temples and who were dedicated to their healing. An important part of their sleep initiation was the use of opiates that no doubt intensified the participants' hallucinations and increased the experience of connection with the gods directly. The pilgrims also had to endure a long process of purification before they were allowed to sleep in the abaton (sacred temple).

The remedies prescribed were interpreted by the appointed priests and priestesses who were both specially trained and selected for their role as divine interpreters. Their training was rigorous. They were greatly respected and were in charge of the sacred sleep session that was termed the "hour of the sacred lamps." All of the pilgrims were expected to prepare for their encounter by purification rituals that included fasting, bathing, and spending time in meditation and self-reflection before they were allowed to sleep in the abaton. What is especially meaningful is the fact that much of the wisdom that was shared with the participants from priestesses and priests was based on concepts that are currently considered the foundation for integrative medicine. Pilgrims were encouraged by the temple healers to eat well, exercise, pursue beauty in nature as a healing tool, receive massages, immerse themselves in hydrotherapy, and use aromatherapy because mind, body, and spiritual healing was part of the healing culture at the temples. Each person who participated in the sacred sessions would be given a personal protocol that they were encouraged to follow, and arts activities such as music, dance, drama, and painting were considered an import aspect of their complete prescription.

The Nei Ching was written more than 2,000 years ago and is still considered the bible of Traditional Chinese Medicine. It is remarkable that the use of specific medical protocols ascertained by color diagnosis was included in that ancient text. The civilizations at that time emphasized the natural order and were keen observers of nature. They knew that the colors that they observed in nature could affect people's well-being, and healers from that time included the use of herbs (both ingested and applied directly on the body) and encouraged a diet of healthy foods, including fruit and vegetables, not only to regain health from serious problems but also to sustain health. In addition, the Romans and the Greeks were well aware of the therapeutic properties of sunlight and immersed themselves in sunbaths, sponging their bodies with cold water when they had finished sunbathing. Another popular healing practice with color was utilized by the Egyptians as early as 1550 BC with a practice called gem healing. Egyptian healers would grind up gemstones and place them in water to be charged energetically from the sun, often called magnetized water. Patients would drink these sun-charged liquids after they remained in the sun

overnight to improve their health. For example, patients suffering from anemia would be asked to drink from a red glass. Centuries later, the medical protocols that are included in colorpuncture training utilize the application of red light for patients who are either anemic or struggling with fatigue. Russian physicians have been giving magnetized water to their patients for more than 30 years for digestive, urinary, and nervous problems, and patients with kidney or gallstone problems have found relief from drinking these elixirs.

During the 1870s, the popular Sun Cure, or therapeutic exposure to sunlight, influenced research decades later into the use of light therapy for seasonal affective disorder. People who suffer from the lack of geographical sunlight often visit warm climates during the winter in an effort to alleviate this problem. In 1903, Neils Ryberg Finsen, MD, received the Nobel Prize for his research using ultraviolet light to treat skin tuberculosis. Ultraviolet light is an effective choice for killing both bacterial and viral agents, is relatively harmless for humans, and has been used in surgical suites for a long time because of its efficacy in preventing infections. As early as 1845, it was known that microorganisms respond to light.¹ The use of ultraviolet light, as well as light with purple hues such as indigo and violet, is a staple for colorpuncture and is highly effective, particularly for acute pain reduction and reducing infection in wounds.

Historical Popularity of Light Therapy

During the 1920s, light therapies were quite popular among physicians, and as a result, many different forms of light therapy devices appeared that utilized various forms of light delivery systems intended to improve the health and well-being of patients. Some of the most popular at that time included electric light baths and the use of wooden cabinets with incandescent lamps lining the cabinets' wall that were especially effective for patients diagnosed with arthritis. Edwin Babbitt, MD, author of the book *Principles of Light and Color*, created his own his method for light applications using a "chromodisc." In his notes, he described his protocol²:

Chromodisc Protocol

1. Patient enters covered by a large sheet
2. Patient discards sheet and sits on low stool
3. Head remains outside (not to overheat)
4. Forehead covered by cold-compress
5. Patient never left alone
6. Pulse rate needs to be monitored
7. Exposure 5–8 minutes as general tonation
8. Afterword patient takes hot and cold shower (to cool down)
9. Patient rests for at least 45 minutes

The interest by physicians in the use of light therapy modalities during the 1920s and continuing into the 1930s was unprecedented. Various names for the delivery of light therapy

were used, including colored light therapy, color therapy, spectra-chrome therapy, and actinotherapy from the root word “atkin” or “ray.” The combination of the word “therapia” or “healing” indicated the therapeutic effects for the applications of colored light. Babbitt was not the first physician to use light therapy with his patients, and as early as 1876, another pioneer on the use of light therapy, Augustus Pleasanton, MD, used blue light to relax his patients with nervous system disorders and conducted research that showed that blue light could stimulate plant growth and affected the glands of the body. According to acupuncturist Anna Cocilovo, author of one of the most comprehensive publications on the use of light therapy, “The scientific explanation for the application of colored light rests in quantum physics and color theory and the photoelectric effect first discovered by Heinrich Hertz (circa 1886), and the theory of light that was elucidated by Albert Einstein. By the photo-electric effect, when light strikes any material substance, electrons are discharged, creating a current. In other words, light interacts with matter as the energy of the light is transferred to electrons.”³ In 1905, Einstein offered an explanation for this phenomenon in his theory of light, for which he received his only Nobel Prize. The theory proposed that light was composed of corpuscular units, later called photons. This photon theory would be later refined and explored by Dr. Fritz-Popp who worked closely with Dr. Mandel to develop colorpuncture methodologies.

This was a very exciting time for physicians during the late 1880s and early 1920s, particularly because they were experimenting with a multitude of innovative light delivery systems and were conducting their own research to create unique medical protocols to help their patients. At that time, there was only a theoretical model to follow. So, they had the freedom to develop their own studies through hands-on experimentation. These physicians were also willing and interested in sharing their research with their colleagues. One of the most passionate physicians who wrote about the use of light therapy was Carl Loeb, MD. His book, *Specific Light Therapy*, was an exhaustive text to help physicians understand the applications and scientific theories behind the use of light therapies. He did not like the term “color therapy” and instead suggested that physicians use the words “light frequencies,” “wavelengths,” or “spectro band”—no doubt because he felt that the term “color therapy” minimized the medical effects of treatment and did not reflect a medical model. According to Loeb, “Color is synonymous with chemistry, which can be utilized by the human body to create energy and functional activity. Color acts with a surprising rapidity that is perplexing to those not acquainted with its therapeutic actions. Is it the purpose of the doctor to restore the patient to health? Is it more important that the doctor use a single road using the old methods? Light therapy is a means to an end and its effectiveness should guide its applications. There is a wrong premise that light frequencies (color) have no physiological and only a psychological effect. This statement is unsound because it is impossible to separate psychological activities from causing physiological responses. Thousands of patients

suffer who could readily be relieved by and often cured by specific light frequency. Medical science is indifferent to these patients. Why the stubbornness?”⁴

Loeb wanted physicians to understand that the light used in therapy and projected on the patient’s body was specific, and he coined the term “specific light therapy” because he believed that the most important aspect for the application of light therapy was the absorption of energy on and in the body. His theories about the scientific basis for the use of light therapy cannot be easily dismissed because he spent more than 18 years conducting research. Foundationally, his methods were based upon the concept that the application of different light frequencies could affect the body and thus improve health. He named his light therapy machine the Prismatic Mountain Sun Machine, and after light therapy treatments, he instructed his patients to take a warm bath with Epson salts to increase the positive effects from the light therapy application. Loeb believed that the cellular structure of the body could be changed by the application of a light source and that the cell’s inherent intelligence would know how to defend itself from disease and possessed an intelligence that was more insightful “than the doctor with his limited knowledge of the human body.”⁴ His theories were later expanded upon by Mandel and Fritz-Popp who also believed that the inherent cellular structure of the body could be changed by light therapies. Another unique aspect of Loeb’s work is that the frequencies of light that he used with patients are similar to the light specifications and attributes that are taught today during colorpuncture training. For example, he suggested using blue light to lower fever and treat burns and advocated its use as a sedative, which mirrors the treatment methodology taught for the use of blue light in colorpuncture treatments.

During the 1930s, another physician, Dr. William Wood, MD, wrote about the use of what he termed “radiant light applications,” believing that the therapeutic actions of light would improve oxygenation of the body and help increase elimination for patients who were constipated. In addition, he recognized that wounds could be healed by the application of colored light therapy. However, without a doubt, one of the most outspoken advocates for the use of colored light therapy was Kate Baldwin, MD, FACS, and Chief Surgeon at Woman’s Hospital in Philadelphia who trained with Dr. Ghadiali, a self-taught physicist from India who founded the Spectro-Chrome Institute in New Jersey. During the Institute’s heyday, more than 800 physicians were taught his methodology for using the machine Ghadiali created called the spectro-chrome machine. He went to great pains to try not to incur the wrath of the medical establishment because he did not have MD credentials, and never claimed to cure anyone, choosing instead to name his technique a tonation system. His machine looked very similar to the light devices that were used in early Hollywood movies and were rather large and bulky, but this machine worked quite well to saturate patients’ bodies with colored light. However, the use of this machine was problematic because patients were required to stay still during each light application in an effort to ensure that the proper areas of

the body were receiving the light sources. The philosophy behind spectro-chrome therapy, according to Ghadiali, was based on three therapeutic principles: (1) the human body responds to light, (2) colors relate to physiologic function, and (3) color tonation would aid bodily function. Knowing that his work was controversial and to his credit, he attempted to stay out of the limelight, but he was not successful. He had a multitude of legal battles, and after one legal confrontation, his Institute was mysteriously burned to the ground. Accused of being a charlatan, it is important to recognize that like all visionaries, he was a target, and his volume of literature attests to the efficacies of his light work with patients. In addition, the fact that Dr. Baldwin risked her own career to testify at one of his trials on his behalf speaks volumes. Below is an excerpt from her statements during his last legal battle.

For about 6 years, I have given close attention to the action of colors in restoring the body's functions and I am perfectly honest in saying that after nearly 37 years of active hospital and private practice in medicine and surgery I can produce quicker and more accurate results with colors than with any or all other methods combined and with less strain on the patient. One of my most famous cases was a little girl named Grace. About four-fifths of her torso was burnt beyond the middle of the body—it went up to the clavicle and under the arm. Burns went from the elbow up clear into the axillary, down to the groin, about four inches on the left leg, back up onto the back and around onto the side. It was not only the skin that was destroyed, but the fascia of the muscle. The fascia is the covering of the muscle. From my surgical and medical experience, with that much of the body burned and to that severity, it would be an absolutely hopeless and fatal case. I was brought in about 24 hours after the burn and the surgeon and the doctor said, “there is no use in trying to do anything with this!” Dressing had been placed so tightly that it was two weeks before I succeeded in getting it all off, as I would not force it off. I told myself that there was nothing in regular medicine or surgery that can make that child live. I told my assistant that we might as well see what the spectro-chrome will do. The child had absolutely nothing but color and diet. I used no surgery at all. I used paper dressing soaked with nut oil and color rays. We used turquoise principally to build the skin. We used other colors to help stimulate the separation of the sloughs off the body. New epithelium, new skin, will not cover over dead tissue and we had to stimulate the separation using stimulating colors. Now, I was criticized for not skin grafting, but where could I get skin to graft? There was no place on the body to skin graft. Today, the little girl has perfectly moveable skin. This is not scar tissue, but skin! Additionally, there was a case of diphtheria in the ward and the staff gave Grace a dose of anti-toxin. She ran up a temperature between 105 and 106. Using turquoise, blue, indigo and violet, I brought her temperature down to normal. I have cured

cases of cancer as well as gonorrhea, syphilis, breast tumors, cataracts, gastric ulcers and glaucoma.⁵

According to Baldwin's description of the application of colored light:

True burns are caused by the destructive action of the red side of the spectrum, hydrogen predominating. Apply oxygen by the use of the blue side of the spectrum, and much will be done to relieve the nervous strain, the healing processes are rapid, and the resulting tissues soft and flexible. In very extensive burns in a child of eight years of age there was almost complete suppression of urine for more than 48 hours, with a temperature of 105 to 106 degrees. Fluids were forced to no effect, and a more hopeless case is seldom seen. Scarlet was applied just over the kidneys at a distance of eighteen inches for twenty minutes, all other areas being covered. Two hours after, the child voided eight ounces of urine. I may commence at the top of the head and cover practically every part of the body: ordinary inflammatory conditions of the eye, hemorrhage into the retina and sclera, infection of the sinuses, bronchitis, pneumonia, pleurisy, tuberculosis, heart conditions (functional and organic), acute indigestion, asthma, hay fever, hiccoughs that had for ten days resisted all classical methods (cured in one day), all sorts of infections (local and systemic), abscesses, jaundice and kidney conditions. I have treated tuberculosis, mastoid troubles, pleurisy, hemorrhoids, rheumatism and lumbago. In many cases of cancer, spectro-chrome will help if there is not too much destruction from surgery.⁵

Baldwin's application of turquoise light on the body consisted of using the spectro-chrome therapy machine with the color turquoise inserted. The patient would lie in the bed while the colored light was turned on the body for a prescribed period of time. The young burn victim she described during the trial continued light therapy treatments for seven months until she was healthy enough to be discharged from the hospital. The application of turquoise light is potent, and according to the principles of spectro-chrome therapy, this color is a skin tonic that can restructure and restore the skin. Turquoise light has the ability to rebuild the skin and stimulate the elimination of dead tissue from the body and is a potent color to use, particularly when working with oncology patients with burns and/or surgical scars. In my experience, I have seen that this color has helped lighten the visual appearance of these scars or burns on the body.

Colorpuncture

Colorpuncture is a holistic and noninvasive form of integrative medicine that is based on acupuncture theory. Colored light is applied to various acupuncture points on the body using treatment protocols that were developed by Peter Mandel, ND, a German scientist and acupuncturist who is the founder of the Mandel Clinic in Bruchsal, Germany, that has been in existence

for more than 40 years. The Colorpuncture Institute in Germany has successfully treated thousands of patients suffering from various ills with applications of light therapy. Mandel was also the Founding Director for this Institute, and his integrative approach for the promotion of health addresses the psycho-social implications of illness from a clinically oriented psychological foundation and honors each patient's unique family history and psychological profile. Using his protocols, patients are treated with a holistic approach that acknowledges mind, body, and spirit. Treatment for migraine, ear problems, joint pain, depression, asthma, learning problems, anxiety, trauma, and other serious health problems are taught in detail throughout colorpuncture training. One of the most important research collaborators with Mandel was German scientist, Fritz Albert Popp, PhD, a professor in theoretical physics. His research has shown that the body emits bio-photons, representing a regulating energy field of the body, and that these small particles of light have essential influences on the biochemical and hormonal processes of the body. When Mandel was developing the scientific applications for colorpuncture, he worked closely with Popp. Mandel believes that the normal living cells of the body emit a regular stream of photons, indicating that there is light living in a cell. If we assume that the healthy cells of the body have a harmonious, uniform quality of light flow, then it is logical that sick cells must have a disharmonious flow of photons.⁶

Although physicians who use color and light therapy may have different mechanisms for application, they all share the philosophy that the application of colored light operates via the skin and picks up light to transmit color impulses inside the body, since each color has its own frequency and therapeutic effects. This cell theory whereby light is communicated via cells has formed the basis for colorpuncture. Even nonbelievers may be surprised that these connections within and on the human body exist. In 1989, Russian researchers from the Institute for Clinical and Experimental Medicine in the Czech Republic showed that existing channels for light in the human body correspond with acupuncture points and that light applied to the human skin can penetrate the body to a depth of between 2 and 30 mm, depending on the color frequency. Using state-of-the-art technology, they were able to track the light penetration and measure its strength. The researchers found that only certain areas of the body were able to transfer light beneath the surface, and that these areas corresponded to locations of specific acupuncture points.⁷

Colorpuncture Applications

Although most practitioners follow a prescribed medical protocol for application of light therapy, I have integrated my training in various forms of energetic healing with patients. The integration of energetic medicine protocols that I created has increased the efficacy of treatments with patients based on anecdotal observations. However, the model of training in colorpuncture practice is more rigid, and practitioners use a handheld device called the acu-light pen containing insertable

colored glass tips while incandescent light is emitted by the battery-operated device. Each colored tip was formulated to a specific frequency within the battery-operated band for each color. Treatment points are identified from traditional acupuncture systems, and training includes diagnostic formulas to use with patients. Specific protocols recommend the use of light applications for 30–60 seconds. However, the time for treatment can vary with each patient and their presentation. Although I am not a physician, I work in integrative medicine and was drawn to the use of colorpuncture after my mother was diagnosed with a rare form of cancer. In an effort to relieve her suffering from multiple surgical procedures and ever-present pain, I investigated many systems of energetic medicine. While searching for a protocol that would help her, I was fortunate to study with the Director of The Esogenic Colorpuncture Institute, who was trained by Dr. Mandel. Because colorpuncture does not require the use of acupuncture needles but an understanding of acupuncture theory, I was able to learn how to use light therapy applications as a substitute for needle insertion. Colorpuncture is an in-depth medical protocol and includes applications for pain relief, insomnia, wound healing, gastrointestinal (GI) issues, and so on. Each diagnosis has a requisite application pattern of light that is applied by the acu-light instrument, sold by the Institute in Germany. Most areas of the body that receive light therapy applications require a 30-second to three-minute application on a particular acupuncture point, depending on what is needed for each patient at that specific session. After a few years of practice, I worked with additional oncology patients at different stages of treatment at the Wellness Community in Boca Raton, Florida. Because I have combined the use of energetic medicine in addition to my training in colorpuncture, I have used the term “spectra-immunology™” to describe my method. According to Dr. David Feinstein, “Conventional medicine at its foundation focuses on the biochemistry of cells, tissue and organs. Energy medicine at its foundation focuses on the energy fields of the body that organize and control the growth and repair of cells, tissue and organs. Changing impaired energy patterns may be the most efficient and least invasive way to improve the vitality of organs, cells and psyche.”⁸

Treatment Sessions

After a diagnostic session with patients, selected meridian points on the body and sometimes tumor sites are determined for this noninvasive technique of applying light. The choice of colors of various hues and frequencies of light (and acupuncture points) vary according to the patient's needs. The application of light therapy rests gently upon the body and does not reach beyond the skin's surface. Painless and relaxing, it is not unusual for patients to fall asleep during a session. Through the years, there have never been any reported adverse reactions from the patients who I have worked with. In addition, an analysis of light therapy treatments for oncology patients at the Wellness Center during the years 2004–2005 upon review are

compelling enough to warrant further research, although this information is anecdotal. In the following, the different attributes of colors are generally described in an effort to provide a background to understand better how particular colors were chosen:

- Red light is stimulating and produces heat. It can also improve circulation.
- Orange light stimulates the appetite, relieves cramps, and helps with problems related to the GI tract.
- Yellow light strengthens the nervous system and is useful for digestive disorders, including bowel problems.
- Green light is antibacterial and helps reduce infections, builds healthy tissue, and is also helpful for joint pain.
- Blue light offers relaxation and helps with migraine reduction, fever reduction, wound care, and acute pain.
- Violet light has antibacterial qualities, balances the nervous system, and helps promote sleep. It is useful for swelling and lowering agitation and blood pressure, and can help to reduce severe pain.
- Indigo is helpful for agitation, sleep disorders, and inflammatory wound problems.

Protocol

Although there was not an Institutional Review Board application filed, I received the approval from the Clinical Director at the Wellness Center. Several educational lectures on the background of light therapy were offered free of charge to interested members of the Wellness Center. The handheld aculight device was shown to the attendees, and there was a question-and-answer segment so that anyone with questions could learn more about this modality. All participants were invited to receive 45- to 60-minute sessions without charge and to sign up for sessions at their convenience, and were told that they did not have to sign up for any prescribed number of treatments. In addition, participants were told that they would be asked to fill out a self-report during the week following the treatment in an effort to determine its effects. They were also informed that at each session, the practitioner would take notes on the session protocols and that any future publication would not contain any names.

During the first meeting, all patients completed a medical history form and were given a post-treatment survey to be mailed (or brought to the next session if they decided to have future sessions). Each participant received a light therapy session according to the health problems they presented with during the session, since there is no one-size-fits-all application. Some patients would receive longer applications of a particular light frequency, while others would have shorter sessions. The integration of energetic medicine during these sessions offered added information about the health problems

of each patient. All of the 33 participants were asked to complete a comprehensive survey after treatment and asked to either mail it back (it was stamped) or bring it to their next session. Of the 33 participants, only six completed the post-treatment sessions. However, returning patients shared their experiences, and notes were taken to document specific light therapy applications and patients' verbal descriptions of how they felt after a treatment session.

Results

The results of this initial anecdotal study with 33 patients showed promise that the application of colored light could make a significant difference for reduction of pain, promotion of wound healing, improvement in mood, and improvement in overall quality of life. The following contains information about each patient culled from the forms sent one week after treatments.

Patient 1

Patient 1 was a 55-year-old woman with gynecological cancer in active chemotherapy treatment. She described a "shooting pain in her uterus," and pain was listed as a 5 on the pain scale (1–10, with 10 being the most pain). Immediately after light therapy sessions, pain was described as 0. One week later, pain was described as a 2, noted as "pain occurring only when standing for long periods of time."

Patient 2

Patient 2 was a 65-year-old woman with breast cancer. However, she was currently in remission. She described pain in her big toes, but did not delineate on pain scale. Immediately after light therapy sessions, she said she had less pain. One week later, she said that the pain in her toes was gone.

Patient 3

Patient 3 was a 58-year-old man with stomach and esophageal cancer in chemotherapy treatment. His pain was related directly to trouble swallowing and gagging often. He rated his pain as a 4 on the pain scale. Immediately after light therapy sessions, he said he felt better. One week later, pain was described as a 2. Nausea was rated as a 3, vomiting a 2, and lack of appetite as 4 pretreatment. One week later, his caretaker reported anecdotally that he was doing better. She added, "He ate five potato pancakes with dinner and hasn't eaten like that in a long time." In addition, she said that he did not gag at night, and he did not vomit.

Patient 4

Patient 4 was a 79-year-old man with prostate cancer in chemotherapy treatment. He said that he had "sharp-stabbing knee pain" and that the bottoms of his feet were burning. He rated the pain as a 5. He also cited pretreatment GI problems, including urinary incontinence, and depression. Although he did not rate his pain one week later, he said that he was walking better, that he was "able to hold his urine better," "not as

cranky,” had “more interactions with people,” and he was “talking with people more.”

Patient 5

Patient 5 was a 67-year-old woman with breast cancer who had completed treatment. She described her pain as a 9 on the pain scale. Immediately after light therapy sessions, she reported that her pain was a 6 and that she “felt better.” One week later, she reported that her pain was a 4.

Patient 6

Patient 6 was a 75-year-old woman with pelvic cancer in treatment. She reported pain from foot cramps. Immediately after light therapy sessions and one week later, she said the foot cramps were gone.

Anecdotal Data

The following are data culled from all participants ($n = 33$), identifying some of the symptoms that they currently were experiencing—symptoms that are common for oncology patients. The second section of data identifies comments cited by participants immediately after treatment, and during subsequent sessions.

Pretreatment:

Pain	33
GI problems	9
Wound healing	2
Cramps	7
Balance difficulties	10
Nausea/vomiting	6
Sleep disorders	14
Anxiety	12
Depression	10
Immune problems	33

Anecdotal comments shared by patients after treatment sessions:

“Pain in my uterus is gone.”
 “My energy has improved.”
 “Color and light therapy has been a blessing.”
 “Red blood cells back to normal for first time. I didn’t need Procrit.”
 “Everything keeps getting better and better.” “I just had three normal stools.”
 “Nausea and pain is gone instantly.”
 “I am so excited, I don’t have problems with my eyes for the first time.”
 “Feeling great.” “No gagging in the middle of the night.”
 “Is it possible it works so fast?” “No pain in my jaw.”
 “Port pain is gone. I can move my arm again.” “Port pain returned when port was flushed.”
 “The veins in my legs look better.”
 “My ears are clear for the first time in two days. I feel a sense of buoyancy and feel pain free.” “Graininess in my eyes better about 50%.”

“I know I am paralyzed, but I can feel an explosion of energy on my feet.”

Considerations

This study did not look at any particular symptom such as pain or nausea, and all quotations are purely anecdotal. In addition, all patients receiving treatment had different types of cancer diagnosis and were in different stages of treatment. Medications and vitamins were also not standardized. So, in future research, I plan on working with a particular oncology population and researching pain control. It is possible to surmise from the anecdotal evidence that this was a placebo effect. However, after witnessing countless people who during the initial interview were unable to walk, suffered from a lack of regular bowel movements, or were in pain, it is difficult to ascertain that the efficacy of these treatments for more than 30 people can be attributed to a placebo effect. After analyzing this anecdotal information and my treatment notes, I believe that the application of color and light therapy can be an effective noninvasive protocol for oncology patients experiencing the often-debilitating side effects from cancer treatments. It has been shown anecdotally to improve quality of life, although further research needs to be conducted.

Future Research

Although this study was small, it should be noted that helping even one person experience sleep, have a bowel movement, or a reduction of pain and increased appetite is important. The author will be conducting a pilot study with patients at the Neuro-Immune Institute at the Dr. C. Kiran College of Osteopathic Medicine at Nova Southeastern University in Fort Lauderdale, Florida. It is hoped that this study will offer insight to understand the efficacy of light therapy applications for people with fibromyalgia and chronic fatigue. If the results of this study are positive, hopefully it can offer solutions for a noninvasive form of therapeutic application that can make a difference for improvement in quality of life.

Acknowledgments

The author would like to recognize all of the participants who received light therapy sessions at the Wellness Community and kindly shared their cancer journeys. The author would like to acknowledge Theodora Roseman, “Toby,” who taught her how courage can be embodied and continues to inspire her work.

Author Disclosure Statement

To the best of my knowledge, no competing financial interests exist. ■

References

1. Downes A, Blunt TP. The influence of light upon the development of bacteria. *Nature* 1877;6:218.
2. Babbitt E. *Principles of Light and Color*. New York: Babbitt & Co, 1868.
3. Cocilovo A. Colored light therapy and acupuncture. *Acupuncture Today* 2001;1:1–3.
4. Loeb C. *Specific Light Therapy*. 3rd ed. Chicago, IL: Actino Laboratories, 1927:20–21.
5. Baldwin K. Dr. Baldwin Testifies. Vineland, NJ: Dinshah Health Society, 1931:1–40.
6. Mandel P. *The Sense and Nonsense of Sickness and Pain*. Boulder, CO: The Esogetic Institute, 2006. From Introduction.
7. Pankratou S. Meridians conduct light. *Rau Mind Zeit* 1991;35:16–18.

8. Feinstein D. Acupoint stimulation in treating psychological disorders: Evidence of efficacy. *Rev Gen Psychol* 2012;16:364–380.

Janet Lynn Roseman-Halsband, PhD, MS, R-DMT, is an Assistant Professor of Integrative Medicine at the Dr. C. Kiran College of Osteopathic Medicine at Nova Southeastern University in Fort Lauderdale, Florida. She is the Founding Director of the Sidney Project in Spirituality and Medicine and Compassionate Care™ and a recipient of the Joseph Moore Award from Lesley University, Cambridge, Massachusetts, for her work in oncology.

To order reprints of this article, contact the publisher at (914) 740-2100.